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Issued December 31, 1907.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR JANUARY, 1907.

A program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

LAW.

GEORGE W. WOODRUFF, in Charge.

Claims, A. C. SHAW.

Trespass, P. P. WELLS.

Privileges, M. J. McVEAN.

GENERAL INSPECTION.

FREDERICK E. OLMSTED, Assistant Forester, in Charge, Washington, D. C.

E. T. ALLEN, *Forest Inspector*, Tacoma, Wash.

COERT DU BOIS, *Forest Inspector*, Washington, D. C.

SMITH RILEY, *Forest Inspector*, Washington, D. C.

ELERS KOCH, *Forest Inspector*, Bozeman, Mont.

W. W. CLARK, *Forest Inspector*, Washington, D. C.

F. W. REED, *Forest Inspector*, Wapiti, Wyo.

M. L. ERICKSON, *Assistant Forest Inspector*, 310 Custom-House, Portland, Oreg.

F. A. SILCOX, *Assistant Forest Inspector*, Charleston, S. C.

W. C. HODGE, Jr., *Assistant Forest Inspector*, Washington, D. C.

E. S. BRUCE, *Expert Lumberman*, in the Office of the Forester.

FOREST MANAGEMENT.

THOMAS H. SHERRARD, Assistant Forester, in Charge.

Timber Sales, E. E. CARTER, *Forest Inspector*.

Silvics, R. ZON, *Forest Assistant*.

Cooperation, A. W. COOPER, *Forest Inspector*.

Inspection. { C. S. CHAPMAN, *Forest Inspector*, Boise, Idaho.
P. G. REDINGTON, *Forest Inspector*, Saratoga, Wyo.
J. S. HOLMES, *Assistant Forest Inspector*, Washington, D. C.
W. G. WEIGLE, *Assistant Forest Inspector*, Anaconda, Mont.
W. E. LA FOUNTAIN, *Assistant Lumberman*, Washington, D. C.
E. M. HAMILTON, *Assistant Lumberman*, Deadwood, S. Dak.
A. J. NORTON, *Assistant Lumberman*, Washington, D. C.

PROJECTS.

EXAMINATION OF TIMBER SALES.

Arizona—

San Francisco Mountains Forest Reserve—A. B. RECKNAGEL, W. M. DRAKE, P. T. COOLEDGE, Flagstaff.

California—

Plumas and Diamond Mountain forest reserves—W. G. DURBIN, Beckwith.

Shasta Forest Reserve—P. T. HARRIS, C. A. GALARNEAU, and R. W. WALKER, Sisson.

Sierra Forest Reserve (North)—I. F. ELDREDGE, Madera; assistants, H. G. CALKINS, and B. G. GOLDSMITH.

Sierra Forest Reserve (South)—R. S. POND, Hot Springs.

Idaho—

Sawtooth and Payette forest reserves—S. L. MOORE and L. L. WHITE, Boise.

Montana—

Helena Forest Reserve—J. E. KEACH, Helena.

Hell Gate Forest Reserve—R. Y. STUART, French Gulch.

Oregon—

Cascade Forest Reserve (North)—G. M. HOMANS, Custom-House, Portland; assistant, W. O. DAVIS.

South Dakota—

Black Hills Forest Reserve—H. C. NEEL, Deadwood.

COOPERATIVE.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Odanah.

Northeastern States—

Examination of woodlots and timber tracts—WESLEY BRADFIELD, Washington, D. C.

DENDROLOGY.

GEO. B. SUDWORTH, Assistant Forester, *in Charge*.

PROJECTS.

California—

Study of tanbark trees of Pacific coast—Prof. W. L. JEPSON; permanent address, Berkeley.

Special studies of little-known California trees—four-leaf pine, Torrey pine, Bishop pine—Prof. W. R. DUDLEY, Leland Stanford University.

Florida—

Study of improved method of turpentineing, in cooperation with the Hillman-Sutherland Land Company—FRANK KLARPP, Green Cove Springs.

North Carolina—

Study of characteristics of turpentines derived from American pines, in cooperation with the Department of Chemistry, University of North Carolina—GEORGE A. JOHNSTON (directed by Dr. CHAS. H. HERTY, Professor of Chemistry), Chapel Hill.

Texas—

Study of desert junipers—Prof. W. L. BRAY; permanent address, Austin.

FOREST EXTENSION.

ERNEST A. STERLING, Assistant Forester, *in Charge*.

Inspection, { G. W. PEAVY, *in Charge*, Pasadena, Cal.
G. B. LULL, Sacramento, Cal.

Cooperative Planting, S. N. SPRING.

Reserve Planting, L. C. MILLER.

PROJECTS.

California—

Location of planting sites, San Luis Obispo Forest Reserve—J. D. GUTHRIE, box 997, Pasadena.

Nursery and planting work, Santa Barbara Forest Reserve—G. W. PEAVY, Pasadena; assistants, B. R. H. D'ALLEMAND and H. C. MUZZALL, Santa Barbara.

Nursery and planting work, San Gabriel Forest Reserve—G. W. PEAVY, Pasadena; assistants, E. C. CLIFFORD, S. Y. PARNAY, and WILBUR ANDERSON.

Colorado—

Preparation of a planting plan for the United States Hospital Reservation, New Fort Lyon—S. B. DETWEILER, Colorado City.

Hawaii—

Cooperative experimental planting—R. S. HOSMER, Honolulu.

Nebraska—

Nursery and planting work, Dismal River Forest Reserve—C. A. SCOTT, Halsey; assistant, W. H. MAST.

New Mexico—

Nursery and planting work on the Gila Forest Reserve and the Fort Bayard Military Reservation—W. R. MATTOON, Fort Bayard; assistant, W. B. HADLEY.

Examination for forest planting on the Hondo and Carlsbad irrigation projects—W. R. MATTOON, Fort Bayard.

General Studies—

Preparation of reports and compilation of data on planting stations—J. M. FETHEROLF, Washington, D. C.

Preparation of reports and work connected with reserve reconnaissance—J. F. BOND, Washington, D. C.

Preparation of report on eucalypts—S. J. FLINTHAM, Washington, D. C.

FOREST PRODUCTS.

WM. L. HALL, Assistant Forester, in Charge.

Inspection, M. CLINE.

Forest Measurements, JOHN FOLEY.

Wood Preservation, CARL G. CRAWFORD.

Wood Chemistry, A. L. DEAN.

Wood Utilization, R. S. KELLOGG.

Reserve Engineering, W. E. HERRING.

PROJECTS.

California—

Tests of the strength of eucalyptus wood, in cooperation with the State and the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistant, O. T. SWAN.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, O. P. M. GOSS and CORNELIUS BARRY.

Experiments in wood preservatives—A. L. DEAN, Sheffield Scientific School, Yale University, New Haven; assistants, ERNEST BATEMAN and D. C. PARMELEE.

Idaho—

Experiments in treating fence posts cut from dead lodgepole pine timber on the Henrys Lake Forest Reserve—H. F. WEISS, care Homer E. Fenn, St. Anthony.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, H. S. BETTS and J. A. NEWLIN.

Massachusetts—

Studies of the value of the various woods for pulp—A. D. LITTLE, 93 Broad street, Boston, and H. S. BRISTOL, 696 East First street, South Boston.

Oregon—

Tests of the strength of red fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene; assistant, A. E. OMAN.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Washington—

Tests of western hemlock and forest-reserve timbers, in cooperation with the University of Washington—ROLF THELEN, University Station, Seattle; assistant, H. S. SACKETT.

Seasoning and treating experiments on red fir, tamarack, and cedar cross-ties, Tacoma and Pasco, Wash., and Sand Point, Idaho, in cooperation with the Northern Pacific Railway Company—H. B. EASTMAN, 718 North K street, Tacoma; assistant, W. H. KEMPFER.

General Studies—

Collection of statistics of forest products for the year 1906, in cooperation with the Bureau of the Census—H. M. HALE, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of the uses of dead and mature timber on forest reserves—E. R. HODSON, FREDERICK DUNLAP, and J. D. WARNER, Washington, D. C.

Study of lumber prices—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—W. C. GEER, New Haven, Conn.
 Study of woods used in the vehicle industry—H. B. HOLROYD, Washington, D. C.
 Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.
 Study of creosote production—C. L. HILL, Washington, D. C.

PUBLICATION AND EDUCATION.

HERBERT A. SMITH, Editor, in Charge.

Review, FINDLEY BURNS.

Information, TREADWELL CLEVELAND, Jr.

Education, HERBERT A. SMITH.

Printing, QUINCY R. CRAFT.

PUBLICATIONS IN DECEMBER.

Bulletin 70.—Effect of Moisture on the Strength and Stiffness of Wood.
 Circular 45.—Forest Planting in Eastern Nebraska.
 Circular 46.—Holding Force of Railroad Spikes in Wooden Ties.
 Circular 47.—Strength of Packing Boxes of Various Woods.
 Circular 52.—The Lumber Cut of the United States in 1905.
 Press Bulletin 142.—All Industries Furthered by National Forests.
 Press Bulletin 143.—Grazing Fees Will be Collected on Reserves.
 Press Bulletin 144.—American Forestry Honored Abroad.
 Press Bulletin 145.—Successful New Experiments in Turpentining.
 Trade Bulletin 10.—Effect of Duration of Stress on Strength and Stiffness of Wood.
 Trade Bulletin 11.—Resistance of Wood to Shock.

RECORD.

JAMES B. ADAMS, Special Fiscal Agent, in Charge.

Maintenance, GEO. G. ANDERSON.

Accounts, GEO. E. KING.

Purchase, HARRY C. TOWERS.

GRAZING.

A. F. POTTER, Inspector of Grazing, in Charge.

Inspection, { C. H. ADAMS, Washington, D. C.
 W. C. CLOS, Washington, D. C.
 J. T. WEDEMYER, Silver City, N. Mex.

RESERVE ORGANIZATION.

R. E. BENEDICT, Forest Inspector, in Charge.

FOREST RESERVES.

NORTHERN DISTRICT.

JOHN H. HATTON, Forest Inspector, in Charge.

IDAHO.

Bear River Forest Reserve—J. F. SQUIRES, Forest Supervisor, Logan, Utah.
 Bitter Root Forest Reserve—CASSIUS M. DAY, Forest Supervisor, Kooskia.
 Cassia Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.

Coeur d'Alene Forest Reserve—F. A. FENN, Forest Supervisor, Wallace.

Henrys Lake Forest Reserve—HOMER E. FENN, Forest Supervisor, St. Anthony;
J. F. BRUNS, Forest Assistant, St. Anthony.

Payette Forest Reserve—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise;
C. E. DUNSTON, Forest Assistant, Boise.

Pocatello Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.

Priest River Forest Reserve—B. F. McCONNELL, Forest Supervisor, Priest River;
R. L. FROMME, Forest Assistant, Priest River.

Sawtooth Forest Reserve—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise;
C. E. DUNSTON, Forest Assistant, Boise.

Weiser Forest Reserve—JOHN B. LAFFERTY, Forest Supervisor, Weiser.

MINNESOTA.

Minnesota Forest Reserve—G. E. MARSHALL, Assistant Lumberman in Charge,
Cass Lake.

MONTANA.

Big Belt Forest Reserve—ROBERT J. MOORE, Forest Ranger in Charge, Townsend;
M. N. STICKNEY, Forest Assistant, Helena.

Big Hole Forest Reserve (Northern Division)—E. A. SHERMAN, Forest Supervisor,
Missoula.

Big Hole Forest Reserve (Southern Division)—J. B. SEELEY, Forest Supervisor,
Sheridan.

Bitter Root Forest Reserve (Montana Division)—ELERS KOCH, Forest Supervisor,
Missoula; W. W. WHITE, Forest Assistant, Missoula.

Crazy Mountains Forest Reserve—E. C. RUSSELL, Forest Supervisor, Livingston.

Ekalaka Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.

Elkhorn Forest Reserve—ROBERT J. MOORE, Forest Ranger in Charge, Townsend;
M. N. STICKNEY, Forest Assistant, Helena.

Gallatin Forest Reserve—DAVID CONKLING, Forest Supervisor, Bozeman; DORR
SKEELS, Forest Assistant, Bozeman.

Helena Forest Reserve—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N.
STICKNEY, Forest Assistant, Helena.

Hell Gate Forest Reserve (east of Bitter Root Slope)—E. A. SHERMAN, Forest
Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Hell Gate Forest Reserve (Bitter Root Slope)—ELERS KOCH, Forest Supervisor,
Missoula; W. W. WHITE, Forest Assistant, Missoula.

Highwood Mountains Forest Reserve—JAMES G. THAIN, Forest Supervisor,
Highwood.

Kootenai Forest Reserve—J. N. HAINES, Forest Supervisor, Libby.

Lewis and Clark Forest Reserve (Northern Division)—F. N. HAINES, Forest Super-
visor, Kalispell; D. G. KINNEY, Forest Assistant, Kalispell.

Lewis and Clark Forest Reserve (Southern Division)—PAGE S. BUNKER, Forest
Ranger in Charge, Kalispell; D. G. KINNEY, Forest Assistant, Kalispell.

Little Belt Forest Reserve—IRA E. TODD, Forest Supervisor, Neihart.

Lolo Forest Reserve—E. A. SHERMAN, Forest Supervisor, Missoula.

Long Pine Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.

Madison Forest Reserve—J. B. SEELY, Forest Supervisor, Sheridan.

Pryor Mountains Forest Reserve—W. H. PEARCE, Forest Supervisor, Wapiti.

Snowy Mountains Forest Reserve—IRA E. TODD, Forest Supervisor, Neihart.

Yellowstone Forest Reserve (Absaroka Division)—E. C. RUSSELL, Forest Super-
visor, Livingston; BERT P. KIRKLAND, Forest Assistant.

SOUTH DAKOTA.

Black Hills Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood; R. P. IMES, Assistant Forest Inspector, Deadwood.

Cave Hills Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.

Short Pine Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.

Slim Buttes Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.

WYOMING.

Big Horn Forest Reserve—W. E. JACKSON, Forest Supervisor, Bighorn.

Medicine Bow Forest Reserve (Wyoming)—JAMES BLACKHALL, Acting Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga; JAMES BLACKHALL, Forest Ranger, Saratoga.

Sierra Madre Forest Reserve—JAMES BLACKHALL, Acting Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga.

Yellowstone Forest Reserve (Wind River Division)—ZEPH JONES, Forest Supervisor, Pinedale; G. H. CECIL, Forest Assistant, Wapiti.

Yellowstone Forest Reserve (Teton Division)—ROBERT E. MILLER, Forest Supervisor, Jackson; CLARENCE N. WOODS, Forest Ranger, Jackson.

Yellowstone Forest Reserve (Shoshone Division)—W. H. PEARCE, Forest Supervisor, Wapiti; G. H. CECIL, Forest Assistant, Wapiti; HARRY THURSTON, Forest Ranger, Marquette.

SOUTHERN DISTRICT.

F. S. BREEN, Forest Supervisor, in Charge.

ARIZONA.

Black Mesa Forest Reserve—T. S. WOOLSEY, Acting Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Chiricahua Forest Reserve—C. T. MCGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant, Paradise.

Grand Canyon Forest Reserve (Northern Division)—LORUM PRATT, Forest Supervisor, Fredonia.

Grand Canyon Forest Reserve (Southern Division)—T. S. WOOLSEY, Acting Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff; PATRICK A. FENTON, Forest Ranger, Grand Canyon.

Huachuca Forest Reserve—ROBERT J. SELKIRK, Forest Ranger in Charge.

Mount Graham Forest Reserve—H. A. E. MARSHALL, Forest Supervisor, Safford.

Pinal Mountains Forest Reserve—H. A. E. MARSHALL, Forest Supervisor, Safford.

Prescott Forest Reserve—F. C. W. POOLER, Forest Supervisor, Prescott.

San Francisco Mountains Forest Reserve—T. S. WOOLSEY, Acting Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Santa Rita Forest Reserve—T. F. MEAGHER, Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.

Santa Catalina Forest Reserve—T. F. MEAGHER, Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.

Tonto Forest Reserve—W. H. REED, Forest Supervisor, Roosevelt.

COLORADO.

Battlement Mesa Forest Reserve—DAVID ANDERSON, Forest Ranger in Charge, Collbran.

Cochetopa Forest Reserve—R. W. SHELLABARGER, Forest Supervisor, Moffat.

Fruita Forest Reserve—H. K. PORTER, Forest Supervisor, Delta.

Gunnison Forest Reserve—WM. R. KREUTZER, Forest Ranger in Charge, Gunnison.

Holy Cross Forest Reserve—HARRY H. FRENCH, Forest Ranger in Charge, Glenwood Springs; F. H. MORRILL, Forest Assistant, Glenwood Springs.

Leadville Forest Reserve—L. A. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant, Leadville.

Medicine Bow Forest Reserve (Colorado Division)—SHEP N. HUSTED, Forest Supervisor, Fort Collins.

Montezuma Forest Reserve—H. N. WHEELER, Forest Supervisor, Durango.

Park Range Forest Reserve—THOMAS HOGAN, Forest Ranger in Charge, Kremmling.

Pikes Peak Forest Reserve—MARK A. WOODRUFF, Forest Supervisor, Denver; T. D. WOODBURY, Forest Assistant, Denver; F. D. WHITNEY, Forest Ranger, Florissant.

San Isabel Forest Reserve—EUGENE WILLIAMS, Forest Supervisor, Westcliffe.

San Juan Forest Reserve—F. C. SPENCER, Forest Supervisor, Monte Vista; W. J. MORRILL, Forest Assistant, Monte Vista.

Uncompahgre Forest Reserve—H. K. PORTER, Forest Supervisor, Delta.

Wet Mountains Forest Reserve—EUGENE WILLIAMS, Forest Supervisor, Westcliffe.

White River Forest Reserve—JAMES A. BLAIR, Forest Supervisor, Meeker.

KANSAS.

Garden City Forest Reserve—C. A. SCOTT, Forest Assistant in Charge, Halsey, Nebr.

NEBRASKA.

Niobrara Forest Reserve—C. A. SCOTT, Forest Assistant in Charge, Halsey.

Dismal River Forest Reserve—C. A. SCOTT, Forest Assistant in Charge, Halsey.

North Platte Forest Reserve—C. A. SCOTT, Forest Assistant in Charge, Halsey.

NEW MEXICO.

Gila Forest Reserve—R. C. MCCLURE, Forest Supervisor, Silver City; A. O. WAHA, Forest Assistant, Silver City; M. SMITH, Forest Assistant, Silver City.

Jemez Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Lincoln Forest Reserve—JOHN KERR, Forest Supervisor, Capitan.

Pecos River Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Portales Forest Reserve—A. L. CHESHER, Forest Ranger in Charge, Portales.

OKLAHOMA.

Wichita Forest Reserve—E. F. MORRISSEY, Forest Supervisor, Cache.

UTAH.

Aquarius Forest Reserve—GEO. H. BARNEY, Forest Supervisor, Escalante.

Beaver Forest Reserve—WILLIAM HURST, Forest Supervisor, Beaver.

Dixie Forest Reserve—CHAS. G. Y. HIGGINS, Forest Ranger in Charge, Parowan.

Fillmore Forest Reserve—WILLIAM HURST, Forest Supervisor, Beaver.

Fish Lake Forest Reserve—N. E. SNELL, Forest Ranger in Charge, Salina.

Grantsville Forest Reserve—CHARLES F. COOLEY, Forest Supervisor, Grantsville.

La Sal Forest Reserve—ORRIN C. SNOW, Forest Ranger in Charge, Moab.

Manti Forest Reserve—A. W. JENSEN, Forest Supervisor, Ephraim.

Payson Forest Reserve—DAN S. PACK, Forest Supervisor, Payson.

Salt Lake Forest Reserve—E. H. CLARKE, Forest Supervisor, Murray.

Sevier Forest Reserve—TIMOTHY C. HOYT, Forest Ranger in Charge, Parowan.

Uinta Forest Reserve—WILLARD I. PACK, Forest Supervisor, Provo; D. S. MARSHALL, W. JONES BOWEN, Deputy Forest Supervisors, Provo; H. F. STUDLEY, Forest Assistant, Provo; WM. A. ANDERSON, JOHN A. PACK, Forest Rangers.

Wasatch Forest Reserve—E. H. CLARKE, Forest Supervisor, Murray.

WESTERN DISTRICT.

M. B. ELLIOTT, Forest Supervisor, in Charge.

ALASKA.

Alexander Archipelago and Afognak forest reserves—W. A. LANGILLE, Forest Inspector in charge of reserves in Alaska, Ketchikan.

CALIFORNIA.

Diamond Mountain Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy; A. R. POWERS, Forest Assistant, Quincy.

Klamath Forest Reserve—R. L. P. BIGELOW, Forest Supervisor, Yreka; C. J. BUCK, Forest Assistant, Yreka.

Lassen Peak Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy; A. R. POWERS, Forest Assistant, Quincy; JOSEPH C. LA PLANT, Forest Ranger, Burney.

Modoc Forest Reserve—A. H. HOGUE, Forest Supervisor, Alturas.

Plumas Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy; A. R. POWERS, Forest Assistant, Quincy.

San Bernardino Forest Reserve—R. H. CHARLTON, Forest Supervisor, Los Angeles; NELS O. TORSTENSON, Forest Ranger, San Bernardino.

San Gabriel Forest Reserve—R. H. CHARLTON, Forest Supervisor, Los Angeles; B. H. CROW, Forest Ranger, Pasadena.

San Jacinto Forest Reserve—J. R. BELL, Forest Supervisor, Hemet.

San Luis Obispo Forest Reserve—E. S. MAINWARING, Forest Supervisor, San Luis Obispo.

Santa Barbara Forest Reserve—W. M. SLOSSON, Forest Supervisor, Santa Barbara; J. REBMANN, Forest Assistant, Santa Barbara; STEPHEN H. DOUGLASS, Forest Ranger, Ventura.

Shasta Forest Reserve—G. A. COLEMAN, Forest Supervisor, Sisson; R. C. HACKLEY, Forest Assistant, Sisson.

Sierra Forest Reserve (Northern Division)—C. H. SHINN, Forest Supervisor, Northfork; ERNEST BRITTEN, Forest Ranger, Three Rivers.

Sierra Forest Reserve (Southern Division)—W. B. GREELEY, Forest Supervisor, Hot Springs, Tulare County.

Stanislaus Forest Reserve—S. L. N. ELLIS, Forest Supervisor, Sonora.

Tahoe Forest Reserve—JNO. C. WELLS, Acting Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant, Nevada City.

Trabuco Canyon Forest Reserve—J. R. BELL, Forest Supervisor, Hemet.

Trinity Forest Reserve—F. H. HAFLEY, Deputy Forest Supervisor, Weaverville; C. J. BUCK, Forest Assistant, Yreka.

Warner Mountains Forest Reserve—A. H. HOGUE, Forest Supervisor, Alturas.

NEVADA.

Charleston Forest Reserve—DAVID BARNETT, Forest Ranger in Charge, Los Vegas; O. S. MARSHALL, Deputy Forest Supervisor, Los Vegas.

OREGON.

Ashland Forest Reserve—S. C. BARTRUM, Forest Supervisor, Roseburg.

Blue Mountains Forest Reserve (Western Division)—A. S. IRELAND, Forest Supervisor, Prineville; HENRY IRELAND, Deputy Forest Ranger, Prineville.

Blue Mountains Forest Reserve (Eastern Division)—S. S. TERRELL, Forest Supervisor; D. B. SELLER, Forest Superintendent, Sumpter.

Bull Run Forest Reserve—D. D. BRONSON, Forest Inspector in Charge, Portland; W. B. WILSON, Deputy Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.

Cascade Forest Reserve (Northern Division)—D. D. BRONSON, Forest Inspector in Charge, Portland; W. B. WILSON, Deputy Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland; MILTON J. ANDERSON, Forest Ranger, The Dalles.

Cascade Forest Reserve (Southern Division)—S. C. BARTRUM, Forest Supervisor, Roseburg.

Chesnimnus Forest Reserve—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Maury Mountains Forest Reserve—A. S. IRELAND, Forest Supervisor, Prineville.

Wallowa Forest Reserve—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Wenaha Forest Reserve—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash.

WASHINGTON.

Mount Rainier Forest Reserve—G. F. ALLEN, Forest Supervisor, Orting; C. H. FLORY, Forest Assistant, Orting.

Olympic Forest Reserve—FRED HANSON, Forest Supervisor, Hoodspport.

Wenaha Forest Reserve—J. M. SCHMITZ, Forest Supervisor, Walla Walla.

Washington Forest Reserve (Western Division)—G. B. COLEMAN, Forest Supervisor, Sumas.

Washington Forest Reserve (Eastern Division)—G. W. MILHAM, Forest Supervisor, Chelan.

Reserve Boundaries, CLYDE LEAVITT.

Compilation, H. J. TOMPKINS.

PROJECTS.

Examination of proposed reserves and additions to and eliminations from existing reserves, and examinations of agricultural land in Forest Reserves under act of June 11, 1906—W. H. B. KENT, in Charge, Albany Hotel, Denver, Colo.:

Arizona—

STANTON G. SMITH and JOHN W. FARMER, Flagstaff.

Colorado—

W. J. MORRILL, Glenwood Springs, and E. W. SHAW, Moffat.

Florida—

C. D. MELL, Gainesville.

Hawaii—

R. S. HOSMER, Honolulu.

Idaho—

JOHN H. CLARK, Cambridge.

Montana—

R. V. R. REYNOLDS, Washington, D. C.

New Mexico—

J. H. KINNEY, Capitan.

Oregon—

L. VON WERNSTED, Canyon City.

Washington—

R. W. AYRES and A. C. RINGLAND, care E. T. ALLEN, Tacoma; LEE HARRIS, Chelan.

Survey of boundaries of existing reserves:

California—

F. E. JOY, Sisson.

South Dakota—

PAUL KELLETER, Deadwood.

SERVICE CHANGES IN DECEMBER.

APPOINTED.

Law—

ROBERT H. WHITTEN, Agent, \$15 per month.

Forest Products—

GEORGE HILTON, Draftsman, at \$900 per annum.

Forest Extension—

H. P. BAKER, Collaborator, at \$12 per annum; formerly Forest Assistant at \$1,200 per annum.

Reserve Organization—

ROSS McMILLAN, Forest Supervisor, at \$1,400 per annum, Portales Forest Reserve, New Mexico.

The following persons were appointed Assistant Forest Rangers, at \$900 per annum, upon certification by the Civil Service Commission:

H. W. BRANNAN, BALLARD R. GARRETT, JAMES W. PATTON, JOHN T. GRAY, H. H. GRIFFITHS, WILBUR A. HUESTIS, Trinity Forest Reserve, California,

J. G. SCHERMAN, J. B. STEPHENSON, J. D. MAXFIELD, M. M. ROBERTSON, San Jacinto Forest Reserve, California.

ANDREW F. LAYTON, JAMES F. POORE, Modoc Forest Reserve, California.

G. A. SMITH, GEORGE W. SLOTH, Kootenai Forest Reserve, Montana.

THOMAS W. SLOAN, MARIAN F. MOYA, San Bernardino Forest Reserve, California.

SUMNER T. EZELL, HENRY C. HINTZ, Sawtooth Forest Reserve, Idaho.

JAMES B. REED, San Gabriel Forest Reserve, California.

NORMANDUS C. FAULKNER, Washington Forest Reserve (East), Washington.

V. G. LANTRY, Jr., Yellowstone Forest Reserve (Shoshone Division), Wyoming.

WILLIAM J. CLARK, Sierra Forest Reserve (South), California.

BIRTSALL W. JONES, Santa Catalina Forest Reserve, Arizona.

CHARLES H. KERTZ, Crazy Mountains Forest Reserve, Montana.

ALFRED E. HARRIS, Coeur d'Alene Forest Reserve, Idaho.

G. D. CROCKETT, Cassia Forest Reserve, Idaho.

The following person was appointed a Forest Guard at \$720 per annum:

HENRY H. HOTCHKISS, Gila Forest Reserve, New Mexico.

PROMOTED.

Law—

W. J. MANGAN, Clerk, from \$900 to \$1,000 per annum.

Grazing—

MISS ROSEMARY RHODE, Clerk, from \$600 to \$700 per annum.

Record—

C. E. GAGE, Clerk, from \$1,000 to \$1,100 per annum.

ALBERT MORRIS, Clerk, from \$700 to \$800 per annum.

Reserve Organization—

ROBERT J. SELKIRK, from Assistant Forest Ranger at \$900 per annum to Ranger in Charge at \$1,200 per annum, Huachuca Forest Reserve, Arizona.

HOWARD K. O'BRIEN, from Forest Ranger in Charge at \$1,000 per annum to Forest Supervisor at \$1,500 per annum, Wallowa and Chesniminus forest reserves, Oregon.

CHARLES G. Y. HIGGINS, from Assistant Forest Ranger at \$900 per annum to Ranger in Charge at \$1,200 per annum, Dixie Forest Reserve, Utah.

RICHARD H. RUTLEDGE, from Assistant Forest Ranger at \$900 per annum to Forest Ranger at \$1,200 per annum, Payette Forest Reserve, Idaho.

CLARENCE L. GEORGE, from Assistant Forest Ranger at \$720 per annum to Assistant Forest Ranger at \$900 per annum, Big Belt Forest Reserve, Montana.

RESTORED FROM FURLOUGH.

Forest Management—

DOUGLAS RODMAN, Forest Assistant at \$1,000 per annum.

Reserve Organization—

CLARENCE L. GEORGE, Assistant Forest Ranger, Big Belt Forest Reserve, Montana.

TRANSFERRED.

Law—

BERNARD E. GOW, Clerk, at \$1,600 per annum; from the Department of the Interior.

Reserve Organization—

C. D. MELL, Forest Assistant, from the Office of Dendrology.

JAMES H. KINNEY, Deputy Forest Ranger, from Reserve Organization to Reserve Boundaries.

N. O. TORSTENSON, Forest Ranger, from San Bernardino Forest Reserve, California, to Monterey Forest Reserve, California.

ROBERT J. SELKIRK, Assistant Forest Ranger, from Santa Rita Forest Reserve to Huachuca Forest Reserve, Arizona.

DAVID BARNETT, Forest Ranger, from Uinta Forest Reserve, Utah, to Charleston Forest Reserve, Nevada.

DANIEL S. MARSHALL, Deputy Forest Supervisor, from Uinta Forest Reserve, Utah, to Charleston Forest Reserve, Nevada.

JOHN W. FARMER, Forest Supervisor, from Mount Graham Forest Reserve, Arizona, to Reserve Boundaries.

CLAUDE THOMPSON, Assistant Forest Ranger, from Sierra Forest Reserve (North), California, to San Francisco Mountains Forest Reserve, Arizona.

FURLOUGHED.

Forest Management—

A. K. CHITTENDEN, from January 1, 1907.

A. B. PATTERSON, from January 1, 1907.

Reserve Organization—

A. E. REDSTONE, J. E. REA, Assistant Forest Rangers, Sierra Forest Reserve (North), California.

E. F. RUSSELL, Deputy Forest Ranger, Sierra Forest Reserve (North), California.

JAMES STUART, EDWARD THENON, Assistant Forest Rangers, Bitter Root Forest Reserve, Idaho.

R. H. LISTON, JOSIAH SHURTZ, Assistant Forest Rangers, Aquarius Forest Reserve, Utah.

PARLEY MADSEN, Assistant Forest Ranger, Uinta Forest Reserve, Utah.

WILLIAM H. ROPER, Assistant Forest Ranger, Black Mesa Forest Reserve, Arizona.

HUGH M. GUTHRIE, Assistant Forest Ranger, Cascade Forest Reserve (North), Oregon.

WALTER K. ROBINSON, Assistant Forest Ranger, Trabuco Canyon Forest Reserve, California.

S. A. BLANKENSHIP, Assistant Forest Ranger, Wenaha Forest Reserve, Washington.

ORLAND CHANDLER, Deputy Forest Ranger, San Bernardino Forest Reserve, California.

R. L. SWANSON, Assistant Forest Ranger, Shasta Forest Reserve, California.

C. H. YOUNG, Assistant Forest Ranger, Cascade Forest Reserve (South), Oregon.

R. W. McDONALD, Assistant Forest Ranger, Gunnison Forest Reserve, Colorado.

J. L. AMMON, Assistant Forest Ranger, Klamath Forest Reserve, California.

RESIGNED.

Publication and Education—

ALFRED GASKILL.

Forest Management—

T. J. GARVIN.

Miss E. L. PRICE.

Forest Products—

Miss SAIDEE W. LUTTRELL.

Reserve Organization—

LUTHER F. POLLOCK, Assistant Forest Ranger, Gila Forest Reserve, New Mexico.

KENNETH C. SOOYSMITH, Assistant Forest Ranger, Gila Forest Reserve, New Mexico.

EDWARD S. ZUMWALT, Assistant Forest Ranger, Sierra Forest Reserve (South), California.

JAMES W. SMILEY, Assistant Forest Ranger, Helena Forest Reserve, Montana.

JOHN L. WOODEN, Assistant Forest Ranger, Weiser Forest Reserve, Idaho.

E. H. LEATON, Assistant Forest Ranger, Black Hills Forest Reserve, South Dakota.

JULIAN A. KNIGHT, Assistant Forest Ranger, Madison Forest Reserve, Montana.

F. G. BLAKE, Forest Guard, Jemez Forest Reserve, New Mexico.

W. W. BACON, Assistant Forest Ranger, San Gabriel Forest Reserve, California.

H. G. HAYES, Deputy Forest Ranger, Cascade Forest Reserve (North), Oregon.

SEPARATED.

Reserve Organization—

FRANK S. BROWN, ORSON W. PRATT, REES B. GRIFFITHS, Forest Guards, Grand Canyon Forest Reserve (North), Arizona.

J. S. SIVERTSON, F. P. KELTIE, A. W. BARTLETT, W. J. CLARK, J. J. WESTFALL, A. H. FOSTER, G. S. PURTYMUN, Forest Guards, Sierra Forest Reserve (North), California.

H. H. VAN DUSEN, Forest Guard, San Jacinto Forest Reserve, California.

JOHN N. CHIDESTER, HYRUM LAMB, Forest Guards, Sevier Forest Reserve, Utah.

M. E. KRIGBAUM, LOUIS KOSKI, FRED RUTLEDGE, Forest Guards, Weiser Forest Reserve, Idaho.

THOMAS MOORE, Forest Guard, San Bernardino Forest Reserve, California.

JAMES F. POORE, ANDREW F. LAYTON, Forest Guards, Modoc Forest Reserve, California.

ALBERT BAKER, Forest Guard, Wenaha Forest Reserve, Washington.

JOHN T. HOUGH, Assistant Forest Ranger, Yellowstone Forest Reserve (Wind River Division), Wyoming.

DANIEL C. KERR, Forest Guard, Gunnison Forest Reserve, Colorado.

JOHN W. RYERSON, Assistant Forest Ranger, San Gabriel Forest Reserve, California.

E. TAYLOR, Forest Guard, La Sal Forest Reserve, Utah.

GEORGE D. CROCKETT, Forest Guard, Cassia Forest Reserve, Idaho.

SUSPENDED.**Forest Products—**

HENRY GRINNELL.

DISMISSED FROM THE SERVICE.**Reserve Organization—**

HAROLD J. SAUNDERS, Deputy Forest Ranger, Mount Rainier Forest Reserve, Washington.

BENJAMIN MATTICE, Assistant Forest Ranger, Santa Catalina Forest Reserve, Arizona.

With great regret announcement is made of the death, on November 30, of Armour M. Scholefield, Forest Ranger on the Santa Rita Reserve, Arizona. On January 1, 1907, Scholefield was to have been promoted for efficiency.

SERVICE NOTES FOR JANUARY, 1907.

The use, by members of the Forest Service, of cards bearing their official title is entirely permissible and has proved useful in field work. These cards should be on plain white paper, and in size and type should conform to the accepted standard for visiting cards. The official title should be printed in the lower left-hand corner of the card, and should in every case be identical in statement with the title actually given by appointment.

LAW.

Claims.

The geologists from the Geological Survey who have been examining alleged illegal mining claims in the Prescott Forest Reserve, in Arizona, will, when they have concluded their work on that reserve, examine similar claims on the Jemez, Pecos River, and Lincoln forest reserves, New Mexico.

Their report of the examination made in the Plumas Forest Reserve is now in the hands of the Secretary of the Interior.

Privileges.

The following important special privilege permits were issued by the Forester between November 15 and December 20:

Nevada Power Mining and Milling Company, Reservoir No. 1, in the Northern division of the Sierra Reserve, California.

Arizona Sanitorium and Touring Company, Sanitorium, Black Mesa Reserve, Arizona.

The following right-of-way cases, referred from the Department of the Interior to the Forester for report as to whether the projects would interfere with forest-reserve interests, were returned to that Department between November 15 and December 20 with favorable reports by the Forester:

Mary L. Patton, reservoir; Leon Lake Ditch Company, reservoir and ditch; H. E. Roberts et al., reservoir; Surface Creek Ditch and Reservoir Company, reservoir; George Enos and John Hixon, reservoirs, all in the Battlement Mesa Reserve, Colorado; B. C. Johnson, ditch, and James Head and H. E. Snyder, reservoir, Madison Reserve, Montana; Sheep Creek Irrigation Company, reservoir and ditch, Uinta Reserve, Utah; Bear Creek Water Association, reservoir, Bitter Root Reserve, Montana; F. A. Kreiger, ditch, Yellowstone Reserve (Absaroka), Montana; John B. Heilman, reservoir and ditch, and Fullington & Grace, reservoir, San Juan Reserve, Colorado.

DENDROLOGY.

Additions to the Range of Forest Trees.

Incense Cedar.—The geographical range of incense cedar (*Librocedrus decurrens* Torrey) is now extended 25 miles farther to the north, in Oregon, and over 100 miles farther to the east, than it was formerly known to exist. In connection with field investigations in Oregon, E. E. Carter, of the Forest Service, discovered trees of this species growing on the eastern slope of the Cascade Mountains on the dry foothills southeast of Mount Hood, in townships 4 and 5, ranges 10 and 11 east, at elevations of from 2,200 to 2,700 feet. Formerly this tree was known in Oregon only from the North Fork of the Santiam River and southward over the western slopes of the Cascades, extending eastward on these slopes only to the Warner Mountains. It is also known to range southward in California on the western slopes of the Sierra Nevada and Coast Range mountains, from southern Mendocino County to the San Bernardino, San Jacinto, and Cuyamaca mountains; also in western Nevada and in lower California on Mount San Pedro Matir.

Sugar Pine.—The occurrence of sugar pine (*Pinus lambertiana*) in the Sierra Madre Mountains of the San Gabriel Reserve, in southern California, has recently been noted for the first time by R. D. Craig, technical assistant in the Forest Service. The other principal mountain ranges of southern California are known to contain sugar pine, but it has never before been observed in the Sierra Madre. In the Santa Lucia coast range south of Monterey, Cal., sugar pine was discovered by F. G. Plummer and M. G. Goswell, of the Service, on Santa Lucia and Cone peaks, at elevations between 4,000 and 4,950 feet. It has been known for some time that sugar pine occurs in the Santa Lucia Range, but its exact location there has not before been ascertained.

Macnab Cypress.—New groves of Macnab cypress (*Cupressus macnabiana*) have been discovered for the first time in the Sierra Nevada Mountains of California by G. E. Rutherford, formerly a Forest Guard in the Service. The discovery became known by Mr. Rutherford's sending specimens for identification. He found three groves near Dobbin, Yuba County, Cal., on Dry and Indiana creeks, branches of the Yuba River. G. Syme, who also sent specimens for identification, recently added to the number of known groves of Macnab cypress three new groves near the head of Hooker Canyon in the Napa Mountains, Sonoma County, Cal. These are from 10 to 12 miles south of the groves heretofore known, which are mostly in the mountains of Lake and Napa counties, Cal.

Sitka Cypress.—The late Mr. A. J. Johnson reported, shortly before his death, in 1903, that the Sitka or yellow cypress (*Chamaecyparis nootkatensis*) extends 150 miles south of Mount Hood in the Cascade Range of Oregon. It had previously been observed in Oregon only as far south as Mount Jefferson and the valley of the Santiam River.

California Laurel.—California laurel (*Umbellularia californica*) has recently been observed by J. I. Corbin along the South Fork of the Umpqua River and in Coos County, Oreg. This is a northward extension of from 30 to 40 miles in its range, since it had previously been observed in Oregon as far north only as the Rogue River.

These new extensions of range are exceedingly important discoveries, which came to hand most opportunely for use in the preparation of a manual of Pacific trees now under way. It is very desirable that other members of the Service should report all observations made by them, especially on the range of western forest trees. The information is needed just now to define the distribution of these trees as fully as possible.

Accessions to the Library—Compiled by the Librarian.

Forestry—General.

Cartilla forestal. (Primer of forestry); F. Albert. 1905. 51 p. Illus. (Imprenta, litografia i encuadernacion Barcelona, Santiago de Chile.)

Forest Botany.

El karri, o Eucalyptus diversicolor. (The karri, or Eucalyptus diversicolor); F. Albert. 1906. 20 p. Illus. (Imprenta moderna, Santiago de Chile.)

Silvics.

La reproduccion forestal. (Forest reproduction); E. Maldonado. 1906. 26 p. Illus. (Imprenta moderna, Santiago de Chile.)

Educational.

Yale forest school. Prospectus for 1906-7. 1906. 29 p. (Tuttle, Morehouse & Taylor Co., New Haven, Conn.)

Forest Management.

Lumbering.

Waste in logging southern yellow pine; J. G. Peters. 1906. 12 p. Illus. (From Yearbook, 1905, U. S. Department of Agriculture.)

Would it be practicable for the owners of Canadian timber limits to practice conservative cutting; E. Stewart. 1905. 4 p. (Canada—Department of the interior—Forestry branch. Circular 4.)

Planting.

Como defendernos contra las creces de los rios? (How to prevent the overflow of rivers); F. Gerdtzen. 1906. 8 p. Illus. (Imprenta moderna, Santiago de Chile.)

How to grow young trees for forest planting; E. A. Sterling. 1906. 10 p. Illus. (From Yearbook, 1905, U. S. Department of Agriculture.)

Organization and Administration.

Hawaii—Division of forestry. Report for the year ending December 31, 1905. 1906. 77 pp. Illus. (Hawaiian Gazette Co., Honolulu.)

Los servicios de aguas i bosques. (Water and forest services); F. Albert. 1906. 40 p. (Imprenta, litografia i encuadernacion Barcelona, Santiago de Chile.)

Forest Reserves.

New York—Legislature—Senate. Report of the special committee of the senate on the future policy of the state in relation to the Adirondacks and forest preservation. 1904. 14 p. (O. A. Quayle, Albany.)

Technology.

Prolonging the life of telephone poles; H. Grinnell. 1906. 10 p. Illus. (From Yearbook, 1905, U. S. Department of Agriculture.)

Proceedings of Associations.

Report of the Canadian forestry convention held at Ottawa, January 10, 11, and 12, 1906. 208 p. Illus. (Government printing bureau, Ottawa.)

Forest Enemies.

Diseases of Trees.

Die Stocksäule der Fichte, ihre Entstehung und Verhütung. (The ground rot of spruce, its origin and prevention); F. Boden. Illus. (Published by the author, Hameln.)

Irrigation.

Irrigating sediments and their effects upon crops; R. H. Forbes. 1906. 40 p. Illus. (Arizona agricultural experiment station, Tucson. Bulletin 53.)

FOREST EXTENSION.

Watershed Studies.

John D. Guthrie has submitted a report on the watersheds from which the city of Pocatello, Idaho, obtains its supply of water. These watersheds are located in the Pocatello Reserve, and cover approximately 14,500 acres. As a whole, they are in serious need of protection. It is believed that forest planting upon them will have a beneficial effect upon the permanency and continuity of the stream flow. It is

evident in many parts of the watershed that the former forest cover was much denser than the present one and the change has been brought about by continued burning and overgrazing. It is recommended that for the first three or four years planting be confined to the most favorable situations, as follows: (1) North slopes, (2) areas immediately surrounding the present forest stand, (3) small patches of aspen, (4) the swales at the source of streams, and (5) strips on either side of small streams. Douglas fir is recommended for most extensive planting, but experiments are to be conducted with western yellow pine, lodgepole pine, and western larch, since it is believed that these species will prove valuable in that region. A nursery has already been established at Camp Steely, and seed beds will be planted during the coming spring.

Rangers' Nurseries.

George W. Peavy has established two small rangers' nurseries in the Santa Barbara Reserve. One of these is in the Santa Inez Valley, 23 miles from the city of Santa Barbara and 8 miles by road from the San Marcos nursery station. It has an altitude of 900 feet, and soil conditions are very favorable for successful nursery work. The other nursery is located at rangers' headquarters, on Mono Creek, and is well suited for nursery purposes. Since these nurseries are at low altitudes, it is planned to experiment with some species of the eucalypts as well as with the conifers commonly found in southern California.

Planting Stations.

Semiannual reports from the men in charge of planting stations have been received and indicate excellent progress in nursery work. On December 1, at the six stations, there were 3,188,920 one-year-old and 1,456,900 two-year-old seedlings and 898,860 transplants, making a total of all stock on hand at the stations, in round numbers, of five and a half millions.

Special Studies.

The State geologist of North Carolina has applied to the Forest Service for assistance in devising measures to prevent damage from shifting sands and from the destructive action of the sea along the North Carolina coast. The damage from these sources is increasing yearly, and it seems necessary that some action be taken by the State very soon. An examination of portions of the coast will be begun during this month by a representative of the Forest Service. It is expected that this investigation will find some adequate and practical means of control, as well as indicate a proper policy of action for the State.

PUBLICATION AND EDUCATION.

The resignation of Alfred Gaskill takes from the Forest Service one of its oldest members. He entered the former Division of Forestry in 1899, and his services in many directions were notable.

Addresses on forest subjects were delivered at the following places in December:
Northwest Iowa Horticultural Society, Sioux City, Iowa, December 4; H. P. BAKER.

Agricultural Society of the Brigham Young University, Provo, Utah, December 5
W. C. CLOS.

New Hampshire State Board of Agriculture, Peterboro, N. H., December 6; ALFRED GASKILL.

Western Iowa Horticultural Society, Council Bluffs, Iowa, December 6; H. P. BAKER.

California Water and Forest Association, Sacramento, Cal., December 7; CHARLES H. SHINN.

Oklahoma State Constitutional Convention, Guthrie, Okla., December 8; GEORGE L. CLOTHIER.

Pennsylvania Forestry Association, Philadelphia, Pa., December 10; ALFRED GASKILL.

Illinois State Horticultural Society, Champaign, Ill., December 12; S. N. SPRING.

The Missouri Society, Washington, D. C., December 22; FRED G. PLUMMER.

The Railway Club, Pittsburg, Pa., December 29; WM. L. HALL.

New Forms of General Interest.

(Supply of these forms may be obtained on requisition—Form 668.)

125. Trail poster (muslin, $5\frac{3}{4}$ by $10\frac{1}{2}$ inches).

Guide poster, giving name of the trail and direction and distance of familiar landmarks.

129. Education—Addresses (file card).

For use in the Office of Publication and Education as a record of addresses given, a prompter of forthcoming engagements, and a memorandum of requests for addresses. Members of the Service receiving requests for addresses should report the fact to the Editor, who will, on occasion, send publications, lantern slides, or other material, with a file card to be filled out and returned after the address is given.

130. Herbarium specimen labels.

For use of members of the Service in marking specimens sent for identification to the Dendrologist.

142. Camp poster (muslin, 8 by $10\frac{1}{2}$ inches).

Designed to give information to travelers as to the location and proper use of good camping sites. It is provided with blank spaces for the name of the camp, the distance in either direction to the next camp, and the names of the reserve and of the forest supervisor in charge.

143. Certificate of Service. (Supersedes, except for emergency use, Form 647.)

Party certificate of service, designed especially for use of forest officers in charge in preparing a combined statement of monthly salaries for all the members engaged on the reserve. If the space provided permits, the supervisor should certify to the services of all under his supervision, though they may be engaged on different reserves. To insure the prompt transmission of this certificate the officer in charge may omit the name of any member whose period of service can not for any reason be determined or certified. A Form 3 voucher may be subsequently stated for this claim. Printed instructions on the back of the certificate should be carefully read and followed. By so doing delays and confusion which sometimes attend the introduction of a new form may be avoided. It is hoped that this form will prove a convenience to forest officers, by enabling the Special Fiscal Agent to make prompt settlement of Service accounts, and effect a great saving in the handling, monthly, of numerous forms both in the field and in Washington.

151. Open-Tank Treatment (sheet 8 by $10\frac{1}{2}$ inches, printed and ruled both sides).

This form should be used by all members engaged in experiments by the open-tank preservative-treatment methods.

152. Notice to Stockmen.

A circular for use of forest officers in giving information regarding the grazing periods, allotments, and fees. It is designed for posting in post-offices and other public places.

153. Card Notice to Stockmen.

Penalty postal card for use by forest officers in notifying persons who held grazing permits for 1906 of the date on which applications for permits to graze stock during the coming season must be filed.

157. Sheets of Photographic Township Plats (140), scale, $\frac{1}{4}$ inch to a mile, on onion-skin paper, 19 by 24 inches.

This form is printed on the opposite side of the sheet from which the sketch is to be drawn, thus avoiding erasure of the lines in removing the rough draft. It is intended for use in preparing small scale diagrams to be duplicated by blueprints. Black ink or black lead pencil should be used.

158. Sample Plots Record.

For use in the Section of Silvics in recording measurements from the sample plots. This file is open to members of the Service who desire information concerning the experiments in thinnings, reproduction, removal of litter upon the growth, development of the stand, etc.

Form A (long).

In reprinting Form A the length has been extended to 14 inches, thereby providing 27 lines for entry of items. Those who find the space for itemization inadequate in the old form may requisition a supply of the larger size at once, utilizing the stock on hand in the statement of accounts with few items.

FOREST MANAGEMENT.

The following regulations have been made by the Forester to govern the cut of timber on the Henrys Lake Forest Reserve:

The cut of timber on the Henrys Lake Forest Reserve for the calendar year 1907 will be restricted as follows:

The total cut will be limited to 6,000,000 feet B. M., divided thus:

Four million feet of red fir and the lodgepole pine which occurs with it, of which not to exceed 1,500,000 for free use and the rest for sale.

Two millions of lodgepole pine, for sale or free use at the discretion of the supervisor.

A sale of 90,000,000 feet of western yellow pine has been approved to the Greenlaw Lumber Company at the rate of \$3.50 per thousand feet, under a five-year contract, on the San Francisco Mountains Forest Reserve.

In inserting the date in notices of sale, up to which bids will be received, it is important to see that the period covered by the publication is not less than thirty days.

Silvics.

The Section of Silvics has been transferred from the Office of Publication and Education to the Office of Forest Management, where its services will be especially useful in connection with the many problems arising in the technical management of the reserves, particularly with timber sales.

FOREST PRODUCTS.

Wood Utilization.

The field work in the study of dead timber on the forest reserves has been completed for this season, and final reports are now being prepared. The reserves examined were Pecos River, Jemez, Pikes Peak, Holy Cross, Battlement Mesa, Gunnison, San Juan, Medicine Bow, Beaver, and Uinta.

This study has brought together a great deal of valuable information upon the quantity, condition, accessibility, and usefulness of the sound dead timber on these reserves.

Statistics of Forest Products.

In furtherance of the plan of cooperation between the Bureau of the Census and the Forest Service for the collection of annual statistics of forest products, R. S. Kellogg has been appointed a Special Agent of the Bureau of the Census. Satisfactory progress is being made in the preparations for collecting the statistics for 1906, and so far the plan of cooperation is proving to be an excellent one.

Fence Post Treatments.

The experiments of treating dry lodgepole pine posts with creosote are giving very satisfactory results. The sapwood is entirely penetrated with ease. The time required for sufficient treatment and the best methods of operation are yet to be determined.

RECORD.

Accounts.

Vouchers for salary of Technical Assistants on duty on forest reserves must be forwarded monthly to Washington for settlement by the Supervisor in charge, who will initial all such vouchers and accompany them with Form 647.

Supplies.

A number of letters have recently been received from Forest Officers stating that the agents of local express companies refuse to deliver shipments marked "Prepaid" unless the charges, either in whole or in part, are prepaid in cash. Express shipments from the Service in Washington are, when practicable, prepaid in full to destination, including both express and stage charges. There are, however, a few towns in which the headquarters of Forest Officers are located, remote from the railroads, with which express companies have no stage connections. Shipments to these points are prepaid only to the nearest or most convenient station. When this is done, notation of the fact is made on the invoice of the Property Clerk. Hereafter similar notation will also be attached to each package. In such cases the stage charges *only* should be paid by the consignees, for which a receipt showing rate and weight must be taken and submitted in the monthly reimbursement account. When the payment of charges is demanded on shipments marked "Prepaid in Full to Destination," Forest Officers, before making payment, should request definite instructions from this Office.

Telegrams.

When ordinary commercial telegraphic forms are used they must be marked "Official business, charge Forest Service, Washington, D. C.," and the sender must give the number of his identification card. Official blanks for telegrams are furnished by the Service upon requisition, and these require only the number of the sender's identification card. It is expected that members of the Service will keep themselves supplied with the official blank.

New Forms.

On July 1 new forms of vouchers, Form A, Form 3, and Form 4, were adopted, and members of the Service have been supplied with them. In stating accounts only the new forms should be used. Old forms which are on hand should be destroyed.

GRAZING.

The widely circulated report that Judge Whitson's decision in the case of *United States v. Matthews* would affect the collection of grazing fees is regretted, and it is hoped that the press bulletin of December 12 has helped forest officers to bring the matter before the public in such a way as to correct this misunderstanding.

The half-rate allowance made on a limited number of cattle in each State was a special concession for 1906, and will not apply this year. Aside from this, no material advance in the fees will be made, except that a slightly higher rate will be charged for horses. No count will be made of lambs under 6 months old, but the fees will be increased sufficiently to cover the young stock.

The annual grazing reports show the past year to have been exceptionally favorable for the stockmen. The range has been good everywhere and stock which entered the reserves thin in flesh have come out in good condition at the end of the season. The market has been good and the prices obtained for all classes of live stock have been in advance of last year. It is reported that lambs from the Uinta and Teton reserves topped the market on this class of stock from their respective localities.

Live-stock associations in Oregon, Wyoming, Colorado, and Arizona, whose members are users of the forest reserves, have been recognized and consulted with in regard to important matters directly affecting their members, and the advantage of cooperative action has already been realized in the satisfactory settlement of many local problems.

RESERVE ORGANIZATION.

A few of the supervisors have submitted invoices for lumber, wire, etc., to be used in cabin construction, fencing, etc., on Form 939. Invoices for such items for cabin or fence construction will not be required, and all officers in charge should please so note.

A number of letters, accounts, etc., are received from reserve officers bearing stamped signatures. This practice should be strictly avoided, except in cases where duplicate letters or forms are forwarded. The stamped signature should never appear on original letters, expense accounts, or forms of any kind.

Whenever a forest officer receives a letter which has been misdirected, a brief of the contents of the letter should be noted on the envelope, which should be returned to the forester in order that the mistake may be located in this office and future errors avoided.

Supervisors have authority to grant leave of absence to forest assistants assigned to technical work on their reserves the same as to forest rangers and forest guards.

There seems to be some misunderstanding among local officers in regard to Sundays and holidays included in leave without pay. Sundays and holidays are credited only on leave with pay, but not when on leave without pay, and in the latter case they should be deducted from the salary voucher.

When supervisors initial or otherwise certify a voucher for refund, an indorsement or entry should be made on the proper record (Form 615 for timber sale, 940 for timber settlement, 621 for grazing, 619 for privilege, 618 for trespass, or 938 for mining claims). This record should invariably be consulted before certifying to refunds, in order to prevent the certification of a duplicate refund and in that way contributing to a duplicate payment. Space will be provided for these entries as these forms are reprinted.

NORTHERN DISTRICT.

F. N. Haines, Forest Supervisor of the Lewis and Clark (North) Reserve, is organizing the Kootenai Reserve, in Montana and Idaho, established by Presidential proclamation August 18. The headquarters of the Kootenai Reserve is Libby, Mont. Forest Ranger William H. Daus will be in charge of the Lewis and Clark (North) Reserve during the absence of Supervisor Haines.

Supervisor Ira E. Todd has assumed charge of the additions to the Little Belt Reserve, established by Presidential proclamation December 6. His headquarters will remain at Neihart, Mont.

F. A. Fenn, Forest Supervisor, has started the administration of the Sawtooth addition and the Coeur d'Alene Reserve. The headquarters of the Coeur d'Alene Reserve will be Wallace, Idaho. During Supervisor Fenn's absence Forest Ranger Emil Grandjean will be in charge of the Payette and Sawtooth reserves.

Forest Supervisor Lafferty, of the Weiser Reserve, reports 34 fires during the year 1906. It is worthy of note that the total area burned over was only 320 acres, and the total expenses of fighting the fires, outside of the rangers' time, only \$47.

B. F. McConnell, Forest Supervisor of the Priest River Reserve, has assumed charge of the additions on the east of the reserve established by Presidential proclamation November 6. This increased the area of the Priest River Reserve by 270,880 acres.

Forest Supervisor Haines, of the Lewis and Clark (North) Reserve, has submitted a fire report which shows that the cost of fighting fires in 1906 was only about one-sixth of the cost in 1905. The total area burned over was 904 acres.

Out of a total of 66 fires on the Lewis and Clark (South) Reserve during 1906, Forest Supervisor Bunker reports 56 to have started from locomotives, 7 from lightning, 2 from campers, and 1 from brush burning. The cost of fighting fires on this reserve this year was only one-fifth of that of last year, and the area burned over was very much reduced.

A railroad speeder used for patrol along the Great Northern Railroad proved an unqualified success. One man patrolled several times the area he could have patrolled on foot or horseback, and he had the additional advantage of having with him at all times his tools and camp equipment.

Elers Koch, formerly Forest Inspector, has been made Supervisor of the Montana division of the Bitter Root Reserve and the Bitter Root slope of the Hell Gate Reserve, with headquarters at Missoula, Mont.

Property of the United States Government.

Issued February 1, 1907.

United States Department of Agriculture, FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR FEBRUARY, 1907.

The program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

LAW.

GEORGE W. WOODRUFF, in Charge.

Claims, A. C. SHAW.

Trespass, P. P. WELLS.

Privileges, M. J. McVEAN.

GENERAL INSPECTION.

FREDERICK E. OLMSTED, Assistant Forester, in Charge, Washington, D. C.

E. T. ALLEN, *Forest Inspector*, Tacoma, Wash.

COERT DU BOIS, *Forest Inspector*, Silver City, N. Mex.

SMITH RILEY, *Forest Inspector*, Saratoga, Wyo.

F. W. REED, *Forest Inspector*, Elko, Nev.

M. L. ERICKSON, *Assistant Forest Inspector*, Lakeview, Oreg.

F. A. SILCOX, *Assistant Forest Inspector*, Washington, D. C.

J. H. HATTON, *Forest Inspector*, Groton, S. Dak.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman*, in the Office of the Forester.

FOREST MANAGEMENT.

WILLIAM T. COX, *Forest Inspector, in Charge.*

Timber Sales, **E. E. CARTER**, *Forest Inspector.*

Silvics, **R. ZON**, *Forest Assistant.*

Cooperation, **A. W. COOPER**, *Forest Inspector.*

Inspection. { **C. S. CHAPMAN**, *Forest Inspector, Boise, Idaho.*
P. G. REDINGTON, *Forest Inspector, Keystone, Wyo.*
K. W. WOODWARD, *Assistant Forest Inspector, Washington, D. C.*
W. G. WEIGLE, *Assistant Forest Inspector, Missoula, Mont.*
G. M. HOMANS, *Assistant Forest Inspector, Custom-House, Portland, Oreg.*
W. E. LA FOUNTAIN, *Assistant Lumberman, Saratoga, Wyo.*
E. M. HAMILTON, *Assistant Lumberman, Deadwood, S. Dak.*
A. J. NORTON, *Assistant Lumberman, Santa Fe, N. Mex.*

PROJECTS.

EXAMINATION OF TIMBER SALES.

Arizona—

San Francisco Mountains Forest Reserve—**A. B. RECKNAGEL**, **W. M. DRAKE**, **P. T. COOLEDGE**, Flagstaff.

California—

Plumas and Diamond Mountain forest reserves—**W. G. DURBIN**, Beckwith.

Shasta Forest Reserve—**P. T. HARRIS**, **C. A. GALARNEAU**, and **H. G. MERRILL**, Sisson.

Sierra Forest Reserve (South)—**I. F. ELDREDGE** and **R. S. POND**, Hot Springs.

Idaho—

Sawtooth and Payette forest reserves—**S. L. MOORE** and **L. L. WHITE**, Boise.

Montana—

Helena Forest Reserve—**J. E. KEACH**, Helena.

South Dakota—

Black Hills Forest Reserve—**H. C. NEEL**, Deadwood.

Wyoming—

Yellowstone Forest Reserve (Shoshone division)—**R. Y. STUART**, Wapiti.

COOPERATIVE.

Arkansas—

Working plan for the Stout-Geer Lumber Company, in cooperation with the owners—**S. J. RECORD**, Thornton.

Maine—

Forest conditions—**AUSTIN CARY**, Brunswick.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—**E. M. GRIFFITH**, State Forester, Madison; assistant, **J. A. HOWARTH**, Odanah.

Northeastern States—

Examination of woodlots and timber tracts—**WESLEY BRADFELD**, Washington, D. C.

DENDROLOGY.

GEO. B. SUDWORTH, Assistant Forester, in Charge.

PROJECTS.

California—

Study of tanbark trees of Pacific coast—Prof. W. L. JEPSON; permanent address, Berkeley.

Special studies of little-known California trees—four-leaf pine, Torrey pine, Bishop pine—Prof. W. R. DUDLEY, Leland Stanford University.

Florida—

Study of improved method of turpentinizing, in cooperation with the Hillman-Sutherland Land Company—FRANK KLARPP, Green Cove Springs.

North Carolina—

Study of characteristics of turpentines derived from American pines, in cooperation with the Department of Chemistry, University of North Carolina—WILLIAM S. DICKSON (directed by Dr. CHAS. H. HERTY, Professor of Chemistry), Chapel Hill.

Texas—

Study of desert junipers—Prof. W. L. BRAY; permanent address, Austin.

FOREST EXTENSION.

ERNEST A. STERLING, Assistant Forester, in Charge.

Inspection, {G. W. PEAUVY, *in Charge*, Pasadena, Cal.
G. B. LULL, Sacramento, Cal.

Cooperative Planting, S. N. SPRING.

Reserve Planting, L. C. MILLER.

PROJECTS.

California—

Supervision of planting, San Luis Obispo Forest Reserve—J. D. GUTHRIE, San Luis Obispo.

Nursery and planting work, Santa Barbara Forest Reserve—G. W. PEAUVY, Pasadena; assistants, B. R. H. D'ALLEMAND and H. C. MUZZALL, Santa Barbara.

Nursery and planting work, San Gabriel Forest Reserve—G. W. PEAUVY, Pasadena; assistants, E. C. CLIFFORD, S. Y. PARNAY, and WILBUR ANDERSON.

Colorado—

Preparation of a planting plan for the United States Hospital Reservation, New Fort Lyon—S. B. DETWILER, Colorado City.

Hawaii—

Cooperative experimental planting—R. S. HOSMER, Honolulu.

Nebraska—

Nursery and planting work, Dismal River Forest Reserve—W. H. MAST, Halsey.

New Mexico—

Nursery and planting work on the Gila Forest Reserve and the Fort Bayard Military Reservation—W. B. HADLEY, Fort Bayard.

North Carolina—

State cooperative work—J. F. BOND.

General Studies—

Preparation of reports and compilation of data on planting stations—J. M. FETHEROLF, Washington, D. C.

Preparation of report on eucalypts—S. J. FLINTHAM, Washington, D. C.

Conference of planting station men, February 15 to March 1—G. W. PEAUVY, C. A. SCOTT, W. M. H. MAST, W. R. MATTOON, S. B. DETWILER, Washington, D. C.

FOREST PRODUCTS.

WM. L. HALL, Assistant Forester, in Charge.

Forest Measurements, JOHN FOLEY.

Wood Preservation, CARL G. CRAWFORD.

Wood Chemistry, A. L. DEAN.

Wood Utilization, R. S. KELLOGG.

Reserve Engineering, W. E. HERRING.

PROJECTS.

California—

Tests of the strength of eucalyptus wood, in cooperation with the State and the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistant, O. T. SWAN.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, O. P. M. GOSS and CORNELIUS BARRY.

Experiments in wood preservatives—A. L. DEAN, Sheffield Scientific School, Yale University, New Haven; assistants, ERNEST BATEMAN and D. C. PARMELEE.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, H. S. BETTS and J. A. NEWLIN.

Massachusetts—

Studies of the value of the various woods for pulp—A. D. LITTLE, 93 Broad street, Boston, and H. S. BRISTOL, 696 East First street, South Boston.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene; assistant, A. E. OMAN.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Washington—

Tests of western hemlock and forest-reserve timbers, in cooperation with the University of Washington—ROLF THELEN, University Station, Seattle; assistant, H. S. SACKETT.

Seasoning and treating experiments on Douglas fir, tamarack, and cedar cross-ties, Tacoma and Pasco, Wash., and Sand Point, Idaho, in cooperation with the Northern Pacific Railway Company—W. H. KEMPFER, 718 North K street, Tacoma.

General Studies—

Collection of statistics of forest products for the year 1906, in cooperation with the Bureau of the Census—H. M. HALE, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of the uses of dead and mature timber on forest reserves—E. R. HODSON, FREDERICK DUNLAP, and J. D. WARNER, Washington, D. C.

Study of lumber prices—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—W. C. GEER, New Haven, Conn.

Study of woods used in the vehicle industry—H. B. HOLROYD, Washington, D. C.

Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.

Study of creosote production—C. L. HILL, Washington, D. C.

Study of methods of testing timber—M. CLINE, Washington, D. C.

PUBLICATION AND EDUCATION.

HERBERT A. SMITH, Editor, in Charge.

Review, FINDLEY BURNS.

Information, TREADWELL CLEVELAND, Jr.

Education, HERBERT A. SMITH.

Printing, QUINCY R. CRAFT.

PUBLICATIONS IN JANUARY.

Bulletin 72.—Wolves in Relation to Stock, Game, and the National Forest Reserves.

Circular 53.—Wood Used for Tight Cooperage Stock in 1905.

Forest Planting Leaflets (reprinted as circulars):

- | | |
|---|-----------------------|
| 54. How to Cultivate and Care for Forest Plantations on the Semi-Arid Plains. | 64. Black Locust. |
| 55. How to Pack and Ship Young Forest Trees. | 65. Norway Spruce. |
| 56. Bur Oak. | 66. White Elm. |
| 57. Jack Pine. | 67. Scotch Pine. |
| 58. Red Oak. | 69. Fence Post Trees. |
| 59. Eucalypts. | 70. European Larch. |
| 60. Red Pine. | 71. Chestnut. |
| | 74. Honey Locust. |
| | 77. Cottonwood. |

Press Bulletin 146.—Timber Statistics for 1906.

Press Bulletin 147.—Good Timber Sold Cheap.

Trade Bulletin 12.—The Strength of Elm, Oak, and Locust Insulator Pins.

RECORD.

JAMES B. ADAMS, Special Fiscal Agent, in Charge.

Maintenance, GEO. G. ANDERSON.

Accounts, GEO. E. KING.

Purchase, HARRY C. TOWERS.

GRAZING.

A. F. POTTER, Inspector of Grazing, in Charge.

Inspection, { C. H. ADAMS, Washington, D. C.
W. C. CLOS, Washington, D. C.
J. T. WEDEMEYER, Soda Springs, Idaho.

RESERVE ORGANIZATION.

R. E. BENEDICT, Forest Inspector, in Charge.

FOREST RESERVES.

NORTHERN DISTRICT.

W. W. CLARK, Forest Inspector, in Charge.

IDAHO.

Bear River Forest Reserve—J. F. SQUIRES, Forest Supervisor, Logan, Utah.

Bitter Root Forest Reserve—CASSIUS M. DAY, Forest Supervisor, Kooskia.

Caribou Forest Reserve—J. T. WEDEMEYER, Acting Forest Supervisor, Soda Springs.

Cassia Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.

Coeur d'Alene Forest Reserve—F. A. FENN, Forest Supervisor, Wallace.

- Henrys Lake Forest Reserve—HOMER E. FENN, Forest Supervisor, St. Anthony; J. F. BRUINS, Forest Assistant, St. Anthony.
- Lemhi Forest Reserve—GUY B. MAINS, Forest Supervisor, Mackay.
- Payette Forest Reserve—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant, Boise.
- Pocatello Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.
- Priest River Forest Reserve—B. F. McCONNELL, Forest Supervisor, Priest River; R. L. FROMME, Forest Assistant, Priest River.
- Raft River Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.
- Salmon River Forest Reserve—GEO. G. BENTZ, Acting Forest Supervisor, Salmon City.
- Sawtooth Forest Reserve—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant, Boise.
- Weiser Forest Reserve—JOHN B. LAFFERTY, Forest Supervisor, Weiser.

MINNESOTA.

- Minnesota Forest Reserve—G. E. MARSHALL, Acting Forest Supervisor, Cass Lake.

MONTANA.

- Big Belt Forest Reserve—ROBERT J. MOORE, Forest Ranger in Charge, Townsend; M. N. STICKNEY, Forest Assistant, Helena.
- Big Hole Forest Reserve (Northern Division)—E. A. SHERMAN, Forest Supervisor, Missoula.
- Big Hole Forest Reserve (Southern Division)—J. B. SEELEY, Forest Supervisor, Sheridan.
- Bitter Root Forest Reserve (Montana Division)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.
- Crazy Mountains Forest Reserve—E. C. RUSSELL, Forest Supervisor, Livingston.
- Ekalaka Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.
- Elkhorn Forest Reserve—ROBERT J. MOORE, Acting Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant, Helena.
- Gallatin Forest Reserve—DAVID CONKLING, Forest Supervisor, Bozeman; DORR SKEELS, Forest Assistant, Bozeman.
- Helena Forest Reserve—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant, Helena.
- Hell Gate Forest Reserve (east of Bitter Root Slope)—E. A. SHERMAN, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.
- Hell Gate Forest Reserve (Bitter Root Slope)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.
- Highwood Mountains Forest Reserve—JAMES G. THAIN, Forest Supervisor, Highwood.
- Kootenai Forest Reserve—F. N. HAINES, Forest Supervisor, Libby.
- Lewis and Clark Forest Reserve (Northern Division)—W. H. DAUGS, Acting Forest Supervisor, Kalispell; D. G. KINNEY, Forest Assistant, Kalispell.
- Lewis and Clark Forest Reserve (Southern Division)—PAGE S. BUNKER, Forest Supervisor, Kalispell; D. G. KINNEY, Forest Assistant, Kalispell.
- Little Belt Forest Reserve—IRA E. TODD, Forest Supervisor, Neihart.
- Lolo Forest Reserve—E. A. SHERMAN, Forest Supervisor, Missoula.
- Long Pine Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.
- Madison Forest Reserve—J. B. SEELEY, Forest Supervisor, Sheridan.
- Missoula Forest Reserve—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Pryor Mountains Forest Reserve—W. H. PEARCE, Forest Supervisor, Wapiti.
 Snowy Mountains Forest Reserve—IRA E. TODD, Forest Supervisor, Neihart.
 Yellowstone Forest Reserve (Absaroka Division)—E. C. RUSSELL, Forest Supervisor, Livingston; BERT P. KIRKLAND, Forest Assistant.

SOUTH DAKOTA.

Black Hills Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood; R. P. IMES, Assistant Forest Inspector, Deadwood.
 Cave Hills Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.
 Short Pine Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.
 Slim Buttes Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.

WYOMING.

Big Horn Forest Reserve—W. E. JACKSON, Forest Supervisor, Bighorn.
 Medicine Bow Forest Reserve (Wyoming)—L. G. DAVIS, Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga; JAMES BLACKHALL, Forest Ranger, Saratoga.
 Sierra Madre Forest Reserve—L. G. DAVIS, Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga.
 Yellowstone Forest Reserve (Wind River Division)—ZEPH JONES, Forest Supervisor, Pinedale.
 Yellowstone Forest Reserve (Teton Division)—ROBERT E. MILLER, Forest Supervisor, Jackson; CLARENCE N. WOODS, Forest Ranger, Jackson.
 Yellowstone Forest Reserve (Shoshone Division)—W. H. PEARCE, Forest Supervisor, Wapiti; HARRY THURSTON, Forest Ranger, Marquette.

SOUTHERN DISTRICT.

GEO. H. CECIL, Forest Assistant, in Charge.

ARIZONA.

Black Mesa Forest Reserve—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.
 Chiricahua Forest Reserve—C. T. MCGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant, Paradise.
 Grand Canyon Forest Reserve (Northern Division)—SELDEN F. HARRIS, Forest Supervisor, Fredonia; LORUM PRATT, Deputy Forest Supervisor.
 Grand Canyon Forest Reserve (Southern Division)—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff; PATRICK A. FENTON, Forest Ranger, Grand Canyon.
 Huachuca Forest Reserve—R. A. RODGERS, Acting Forest Supervisor.
 Mount Graham Forest Reserve—H. A. E. MARSHALL, Forest Supervisor, Safford.
 Pinal Mountains Forest Reserve—H. A. E. MARSHALL, Forest Supervisor, Safford.
 Prescott Forest Reserve—F. C. W. POOLER, Forest Supervisor, Prescott.
 San Francisco Mountains Forest Reserve—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.
 Santa Rita Forest Reserve—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.
 Santa Catalina Forest Reserve—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.
 Tonto Forest Reserve—W. H. REED, Forest Supervisor, Roosevelt.

COLORADO.

Battlement Mesa Forest Reserve—DAVID ANDERSON, Acting Forest Supervisor, Collbran.

Cochetopa Forest Reserve—R. W. SHELLABARGER, Forest Supervisor, Moffat.

Fruita Forest Reserve—H. K. PORTER, Forest Supervisor, Delta.

Gunnison Forest Reserve—WM. R. KREUTZER, Acting Forest Supervisor, Gunnison.

Holy Cross Forest Reserve—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; F. H. MORRILL, Forest Assistant, Glenwood Springs.

Leadville Forest Reserve—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant, Leadville.

Medicine Bow Forest Reserve (Colorado Division)—SHEP N. HUSTED, Forest Supervisor, Fort Collins.

Montezuma Forest Reserve—H. N. WHEELER, Forest Supervisor, Durango.

Park Range Forest Reserve—THOMAS HOGAN, Forest Supervisor, Kremmling.

Pikes Peak Forest Reserve—MARK G. WOODRUFF, Forest Supervisor, Denver; T. D. WOODBURY, Forest Assistant, Denver.

San Isabel Forest Reserve—EUGENE WILLIAMS, Forest Supervisor, Westcliffe.

San Juan Forest Reserve—F. C. SPENCER, Forest Supervisor, Monte Vista.

Uncompahgre Forest Reserve—H. K. PORTER, Forest Supervisor, Delta.

Wet Mountains Forest Reserve—EUGENE WILLIAMS, Forest Supervisor, Westcliffe.

White River Forest Reserve—JAMES A. BLAIR, Forest Supervisor, Meeker.

NEBRASKA.

Niobrara Forest Reserve—C. A. SCOTT, Forest Supervisor; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey.

Dismal River Forest Reserve—C. A. SCOTT, Forest Supervisor; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey.

North Platte Forest Reserve—C. A. SCOTT, Forest Supervisor, Halsey.

NEW MEXICO.

Gallinas Forest Reserve—JOHN KERR, Forest Supervisor, Capitan.

Gila Forest Reserve—R. C. MCCLURE, Forest Supervisor, Silver City; A. O. WAHA, Forest Assistant, Silver City; M. SMITH, Forest Assistant, Silver City.

Jemez Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Lincoln Forest Reserve—JOHN KERR, Forest Supervisor, Capitan.

Pecos River Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Portales Forest Reserve—ROSS McMILLAN, Forest Supervisor, Portales.

Taos Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe.

OKLAHOMA.

Wichita Forest Reserve—E. F. MORRISSEY, Forest Supervisor, Cache.

UTAH.

Aquarius Forest Reserve—GEO. H. BARNEY, Forest Supervisor, Escalante.

Beaver Forest Reserve—WILLIAM HURST, Forest Supervisor, Beaver.

Dixie Forest Reserve—CHAS. G. Y. HIGGINS, Forest Supervisor, St. George.

Fillmore Forest Reserve—WILLIAM HURST, Forest Supervisor, Beaver.

Fish Lake Forest Reserve—N. E. SNELL, Forest Ranger in Charge, Salina.

Grantsville Forest Reserve—CHARLES F. COOLEY, Forest Supervisor, Grantsville.

La Sal Forest Reserve—ORRIN C. SNOW, Acting Forest Supervisor, Moab.

Manti Forest Reserve—A. W. JENSEN, Forest Supervisor, Ephraim.

Payson Forest Reserve—DAN S. PACK, Forest Supervisor, Payson.

Salt Lake Forest Reserve—E. H. CLARKE, Forest Supervisor, Murray.

Sevier Forest Reserve—TIMOTHY C. HOYT, Forest Supervisor, Parowan.

Uinta Forest Reserve—WILLARD I. PACK, Forest Supervisor, Provo; W. JONES BOWEN, Deputy Forest Supervisor, Spanish Forks; H. F. STUDLEY, Forest Assistant, Provo; WM. A. ANDERSON, JOHN A. PACK, Forest Rangers.

Vernon Forest Reserve—C. F. COOLEY, Forest Supervisor, Grantsville.

Wasatch Forest Reserve—E. H. CLARKE, Forest Supervisor, Murray.

WESTERN DISTRICT.

M. B. ELLIOTT, Forest Supervisor, in Charge.

ALASKA.

Alexander Archipelago and Afognak forest reserves—W. A. LANGILLE, Forest Inspector in charge of reserves in Alaska, Ketchikan.

CALIFORNIA.

Diamond Mountain Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy; A. R. POWERS, Forest Assistant, Quincy.

Klamath Forest Reserve—R. L. P. BIGELOW, Forest Supervisor, Yreka; C. J. BUCK, Forest Assistant, Yreka.

Lassen Peak Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy; A. R. POWERS, Forest Assistant, Quincy; JOSEPH C. LA PLANT, Forest Ranger, Burney.

Modoc Forest Reserve—A. H. HOGUE, Forest Supervisor, Alturas.

Monterey Forest Reserve—N. O. TORSTENSON, Acting Forest Supervisor, Salinas.

Pinnacles Forest Reserve—N. O. TORSTENSON, Acting Forest Supervisor, Salinas.

Plumas Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy; A. R. POWERS, Forest Assistant, Quincy.

San Bernardino Forest Reserve—R. H. CHARLTON, Forest Supervisor, Los Angeles.

San Gabriel Forest Reserve—R. H. CHARLTON, Forest Supervisor, Los Angeles; B. H. CROW, Forest Ranger, Pasadena.

San Jacinto Forest Reserve—J. R. BELL, Forest Supervisor, Hemet.

San Luis Obispo Forest Reserve—E. S. MAINWARING, Forest Supervisor, San Luis Obispo.

Santa Barbara Forest Reserve—W. M. SLOSSON, Forest Supervisor, Santa Barbara; J. REBMANN, Forest Assistant, Santa Barbara; STEPHEN H. DOUGLASS, Forest Ranger, Ventura.

Shasta Forest Reserve—G. A. COLEMAN, Forest Supervisor, Sisson; R. C. HACKLEY, Forest Assistant, Sisson.

Sierra Forest Reserve (Northern Division)—C. H. SHINN, Forest Supervisor, Northfork; H. J. THOMPkins, Forest Assistant, Northfork; ERNEST BRITTEN, Forest Ranger, Three Rivers.

Sierra Forest Reserve (Southern Division)—W. B. GREELEY, Forest Supervisor, Hot Springs, Tulare County.

Stanislaus Forest Reserve—S. L. N. ELLIS, Forest Supervisor, Sonora.

Tahoe Forest Reserve—JNO. C. WELLS, Acting Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant, Nevada City.

Trabuco Canyon Forest Reserve—J. R. BELL, Forest Supervisor, Hemet.

Trinity Forest Reserve—F. H. HAFLEY, Forest Supervisor, Weaverville.

Warner Mountains Forest Reserve—A. H. HOGUE, Forest Supervisor, Alturas.

NEVADA.

Charleston Forest Reserve—DAVID BARNETT, Acting Forest Supervisor, Los Vegas; D. S. MARSHALL, Deputy Forest Supervisor, Los Vegas.

OREGON.

Ashland Forest Reserve—S. C. BARTRUM, Forest Supervisor, Roseburg.

Blue Mountains Forest Reserve (Western Division)—A. S. IRELAND, Forest Supervisor, Prineville.

Blue Mountains Forest Reserve (Eastern Division)—HENRY IRELAND, Acting Forest Supervisor; S. S. TERRELL, C. R. SEITZ, Deputy Forest Supervisors, Sumpter.

Bull Run Forest Reserve—D. D. BRONSON, Acting Forest Supervisor, Portland; R. B. WILSON, Deputy Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.

Cascade Forest Reserve (Northern Division)—D. D. BRONSON, Acting Forest Supervisor, Portland; R. B. WILSON, Deputy Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.

Cascade Forest Reserve (Southern Division)—S. C. BARTRUM, Forest Supervisor, Roseburg.

Chesnimus Forest Reserve—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Goose Lake Forest Reserve—M. L. ERICKSON, Acting Forest Supervisor, Lakeview.

Heppner Forest Reserve—D. B. SHELLER, Acting Forest Supervisor, Heppner.

Maury Mountains Forest Reserve—A. S. IRELAND, Forest Supervisor, Prineville.

Siskiyou Forest Reserve—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.

Wallowa Forest Reserve—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Wenaha Forest Reserve—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash.

WASHINGTON.

Mount Rainier Forest Reserve—G. F. ALLEN, Forest Supervisor, Orting; C. H. FLORY, Forest Assistant, Orting.

Olympic Forest Reserve—FRED HANSON, Forest Supervisor, Hoodspout.

Wenaha Forest Reserve—J. M. SCHMITZ, Forest Supervisor, Walla Walla.

Washington Forest Reserve (Western Division)—G. B. COLEMAN, Forest Supervisor, Sumas.

Washington Forest Reserve (Eastern Division)—G. W. MILHAM, Forest Supervisor, Chelan.

Reserve Boundaries, CLYDE LEAVITT.

Compilation, R. V. R. REYNOLDS.

PROJECTS.

Examination of proposed reserves and additions to and eliminations from existing reserves, and examinations of agricultural land in Forest Reserves under act of June 11, 1906—W. H. B. KENT, in Charge, Albany Hotel, Denver, Colo.:

California—

F. E. JOY, Sisson.

Arizona—

STANTON G. SMITH, Prescott; JOHN W. FARMER, Flagstaff; H. O. STABLER, Phoenix.

Colorado—

W. J. MORRILL, Glenwood Springs; W. C. HODGE and E. W. SHAW, Hotel Albany, Denver.

Florida—

C. D. MELL, Gainesville.

Hawaii—

R. S. HOSMER, Honolulu.

Idaho—

JOHN H. CLARK, Boise.

New Mexico—

J. H. KINNEY, Capitan.

Oregon—

L. VON WERNSTED, Canyon City.

Washington—

R. W. AYRES, Hotel Sands, Tacoma; A. C. RINGLAND, Hotel Tacoma, Tacoma; LEE A. HARRIS, Chelan.

South Dakota—

PAUL D. KELLETER and C. W. FITZGERALD, Deadwood.

SERVICE CHANGES IN JANUARY.

APPOINTED.

Forest Management—

HOWARD B. OAKLEAF, Expert.

Dendrology—

WILLIAM S. DICKSON, Collaborator.

Forest Products—

OSCAR E. HARING, Draftsman.

J. C. NOEL, Draftsman.

MRS. LILLIAN VAN E. RANCKÉ, Translator.

Publication and Education—

ENOS A. MILLS, Forest Agent.

Reserve Organization—

FRED B. AGEE, Clerk, Medicine Bow Forest Reserve, Wyoming.

The following persons were appointed Assistant Forest Rangers, upon certification by the Civil Service Commission:

ROBERT L. PEETZ, THEODORE SHOEMAKER, Black Hills Forest Reserve, South Dakota.

LOUIS WESSEL, Little Belt Forest Reserve, Montana.

JOHN E. DAVID, Big Hole Forest Reserve, Montana.

FRANK E. RICE, Stanislaus Forest Reserve, California.

J. A. McNAMARA, Medicine Bow Forest Reserve, Colorado.

ARTHUR R. MEYER, San Bernardino Forest Reserve, California.

D. S. PURTYMUN, Sierra Forest Reserve (North), California.

THOMAS H. PARKER, Blue Mountains Forest Reserve (East), Oregon.

WILLIAM B. HOGE, Bear River Forest Reserve, Idaho.

J. G. STANCHFIELD, San Gabriel Forest Reserve, California.

WEBSTER G. MASON, Crazy Mountains Forest Reserve, Montana.

The following persons were appointed Forest Guards:

STEPHEN T. FOSTER, SYLVESTER GILKEY, JAMES H. BONDURANT, JAMES H. SARGENT, WILLIAM E. MOORE, CARL L. ABBOTT, Monterey Forest Reserve, California.

FRED UHLAM, R. E. ROWLEY, H. R. SNIDER, W. W. BRIGGS, CHIPMAN L. CRAWFORD, Coeur d'Alene Forest Reserve, Idaho.

JAMES E. BERGMAN, Lincoln Forest Reserve, New Mexico.

JAMES E. QUINN, Big Hole Forest Reserve (South), Montana.

ALBERT A. GATLIN, Huachuca Forest Reserve, Arizona.

FRANK H. MITCHELL, Black Mesa Forest Reserve, Arizona.

C. A. DANIELS, San Francisco Mountains Forest Reserve, Arizona.

ROBERT H. SIMONDS, Grand Canyon Forest Reserve (South), Arizona.

MORRIS CHRISMAN, Santa Rita Forest Reserve, Arizona.

PROMOTED.

Forest Management—

E. M. HAMILTON, Assistant Lumberman.

W. E. La FOUNTAIN, Assistant Lumberman.

A. J. NORTON, Assistant Lumberman.

Forest Extension—

C. A. SCOTT, from Forest Assistant to Forest Supervisor.

Forest Products—

MISS CAROLINE NORDEEN, Clerk.

Publication and Education—

BRISTOW ADAMS, Expert.

Reserve Organization—

The following forest officers were promoted in salary:

OFFICERS IN CHARGE.

E. F. MORRISSEY, Wichita Forest Reserve, Oklahoma.

W. B. GREELEY, Sierra Forest Reserve (South), California.

S. L. N. ELLIS, Stanislaus Forest Reserve, California.

A. H. HOGUE, Modoc and Warner Mountains forest reserves, California.

R. H. CHARLTON, San Bernardino and San Gabriel forest reserves, California.

GEO. A. COLEMAN, Shasta Forest Reserve, California.

JAMES R. BELL, San Jacinto and Trabuco Canyon forest reserves, California.

R. L. P. BIGELOW, Klamath Forest Reserve, California.

E. S. MAINWARING, San Luis Obispo Forest Reserve, California.

WILLIS M. SLOSSON, Santa Barbara Forest Reserve, California.

CHAS. H. SHINN, Sierra Forest Reserve (North), California.

F. H. HAFLEY, Trinity Forest Reserve, California.

N. O. TORSTENSON, Monterey Forest Reserve, California.

L. A. BARRETT, Plumas, Diamond Mountains, and Lassen Peak forest reserves, California.

F. C. W. POOLER, Prescott Forest Reserve, Arizona.

FRED S. BREEN, Black Mesa, San Francisco, and Grand Canyon (South), forest reserves, Arizona.

WILLIAM H. REED, Tonto Forest Reserve, Arizona.

C. T. MCGLONE, Chiricahua Forest Reserve, Arizona.

H. A. E. MARSHALL, Pinal Mountains Forest Reserve, Arizona.

SELDEN F. HARRIS, Grand Canyon Forest Reserve (North), Arizona.

A. S. IRELAND, Maury Mountains and Blue Mountains (West) forest reserves, Oregon.

S. S. TERRELL, Blue Mountains Forest Reserve (East), Oregon.

PAGE S. BUNKER, Lewis and Clark Forest Reserve (South), Montana.

DAVID ANDERSON, Battlement Mesa Forest Reserve, Colorado.

JAMES A. BLAIR, White River Forest Reserve, Colorado.

THOMAS HOGAN, Park Range Forest Reserve, Colorado.

SHEP N. HUSTED, Medicine Bow Forest Reserve (Colorado Division), Colorado.

W. R. KREUTZER, Gunnison Forest Reserve, Colorado.

R. W. SHELLABARGER, Cochetopa Forest Reserve, Colorado.

FRANK C. SPENCER, San Juan Forest Reserve, Colorado.

H. N. WHEELER, Montezuma Forest Reserve, Colorado.

EUGENE WILLIAMS, San Isabel and Wet Mountains forest reserves, Colorado.

HARRY H. FRENCH, Holy Cross Forest Reserve, Colorado.

G. B. COLEMAN, Washington Forest Reserve (West), Washington.

G. F. ALLEN, Mount Rainier Forest Reserve, Washington.

FRED HANSON, Olympic Forest Reserve, Washington.
 GEO. W. MILHAM, Washington Forest Reserve (East), Washington.
 GEO. H. BARNEY, Aquarius Forest Reserve, Utah.
 E. H. CLARKE, Salt Lake and Wasatch forest reserves, Utah.
 C. G. Y. HIGGINS, Dixie Forest Reserve, Utah.
 TIMOTHY C. HOYT, Sevier Forest Reserve, Utah.
 WILLIAM HURST, Beaver and Fillmore forest reserves, Utah.
 A. W. JENSEN, Manti Forest Reserve, Utah.
 DAN S. PACK, Payson Forest Reserve, Utah.
 WILLARD I. PACK, Uinta Forest Reserve, Utah.
 ORRIN C. SNOW, La Sal Forest Reserve, Utah.
 JOHN KERR, Lincoln Forest Reserve, Gallinas, New Mexico.
 L. F. KNEIPP, Pecos River and Jemez forest reserves, Taos, New Mexico.
 CHAS. A. SCOTT, Niobrara, Dismal River and North Platte forest reserves, Nebraska.
 ROBERT A. RODGERS, Huachuca Forest Reserve, Arizona.
 ROBERT J. SELKIRK, Santa Rita and Santa Catalina forest reserves, Arizona.

FOREST ASSISTANTS.

W. H. B. KENT, Reserve Boundaries.
 A. E. COHOON, Cascade Forest Reserve (North) Oregon.

CLERKS.

B. M. BEMBRY, Pikes Peak Forest Reserve, Colorado.
 LUTHER STEWART, Holy Cross Forest Reserve, Colorado.

DEPUTY FOREST RANGERS.

J. P. WILSON, WILLIAM M. RUDD, JR., WILLIAM H. POWER, ALEXANDER J. MACKAY,
 San Francisco Mountains Forest Reserves, Arizona.

ASSISTANT FOREST RANGERS.

BYRON W. HENNINGS, Lewis and Clark Forest Reserve (North), Montana.
 GILBERT D. BROWN, Cascade Forest Reserve (North), Oregon.
 SIM E. BROWDER, Cascade Forest Reserve (North), Oregon.
 WILLIAM A. SMITH, Santa Barbara Forest Reserve, California.

FOREST GUARDS.

OLE E. BLAIR, Sawtooth Forest Reserve, Idaho.
 ARTHUR BENNETT, Blue Mountains Forest Reserve (West), Oregon.
 WALTER FAY, Chesnimnus Forest Reserve, Oregon.
 ROBERT THOMPSON, Mount Graham Forest Reserve, Arizona.
 E. A. BLEVINS, Chiricahua Forest Reserve, Arizona.
 GEO. L. PRATT, Grand Canyon Forest Reserve (South), Arizona.
 T. F. WELLS, San Francisco Mountains Forest Reserve, Arizona.
 C. H. HAFFLEY, San Francisco Mountains Forest Reserve, Arizona.
 WILLIS CONGER, San Francisco Mountains Forest Reserve, Arizona.
 JAMES O. MORROW, Sierra Forest Reserve (South), California.
 ARTHUR M. NEAL, Wichita Forest Reserve, Oklahoma.
 C. L. CASTLE, A. O. REYNOLDS, Gila Forest Reserve, New Mexico.
 J. P. LEESE, W. B. BLETCHER, L. A. SHARTZER, Jemez Forest Reserve, New Mexico.
 JOHN C. BENSON, Dixie Forest Reserve, Utah.
 HENRY JEFFRIES, Grantsville Forest Reserve, Utah.

The following forest officers were promoted in salary and rank:

HEPLER P. SHOCKLEY, Assistant Forest Ranger, to Deputy Forest Supervisor, Niobrara Forest Reserve, Nebraska.

GEO. A. GORDER, Assistant Forest Ranger to Forest Ranger, Black Hills Forest Reserve, South Dakota.

BYRON O. LOVELACE, WILLIAM A. ANTONONI, OLIVER P. BROWNLOW, P. Y. LEWIS, WILLIAM J. RUSHING, WILLARD L. SEARS, THOMAS C. WEST, Assistant Forest Rangers to Deputy Forest Rangers, Stanislaus Forest Reserve, California.

WILLIAM B. TAYLOR, Deputy Forest Ranger to Forest Ranger, Sierra Forest Reserve (North), California.

MALCOLM McLEOD, JOHN T. NODDIN, CONRAD ALLES, ANDIE K. WOFFORD, Assistant Forest Rangers, to Deputy Forest Rangers, Sierra Forest Reserve (North), California.

FRANK HELFRICH, Assistant Forest Ranger to Forest Ranger, Shasta Forest Reserve, California.

HARRY H. CHIVINGTON, Assistant Forest Ranger to Deputy Forest Ranger, Shasta Forest Reserve, California.

JOSE M. SILVAS, MATTHEW M. SIMS, F. N. THORNTON, ED BISH, F. N. CLARK, Assistant Forest Rangers to Deputy Forest Rangers, San Jacinto Forest Reserve, California.

ERNEST D. PAYNE, VERNON L. BONNER, C. E. RACHFORD, Assistant Forest Rangers to Deputy Forest Rangers, Warner Mountains Forest Reserve, California.

R. W. FLOURNOY, JOSEPH E. COOKE, Assistant Forest Rangers to Deputy Forest Rangers, Diamond Mountains Forest Reserve, California.

FRANK W. HARLEY, Deputy Forest Ranger to Forest Ranger, Klamath Forest Reserve, California.

J. L. AMMON, C. J. QUIGLEY, Assistant Forest Rangers to Deputy Forest Rangers, Klamath Forest Reserve, California.

B. H. CROW, Forest Ranger, San Gabriel Forest Reserve, California.

H. E. WHITE, R. H. HIETT, J. E. GRAHAM, GEORGE CROW, GEORGE H. ALEN, PHILIP BEQUE, Assistant Forest Rangers to Deputy Forest Rangers, San Gabriel Forest Reserve, California.

JOSEPH C. LA PLANT, Forest Ranger, Lassen Peak Forest Reserve, California.

GEORGE A. HALL, WALTER C. ROBINSON, Assistant Forest Rangers to Deputy Forest Rangers, Plumas Forest Reserve, California.

J. H. B. ALLEN, HENRY T. EASTON, CHARLES H. FICK, BERT W. SWITZER, Assistant Forest Rangers to Deputy Forest Rangers, San Bernardino Forest Reserve, California.

WILLIAM C. BURTON, Deputy Forest Ranger to Forest Ranger, Sierra Forest Reserve (South), California.

OSWALD H. KLEIN, HARRY WILKINSON, S. P. ALLEN, WILLIAM W. BAKER, FRANKLIN P. HILTON, Assistant Forest Rangers to Deputy Forest Rangers, Sierra Forest Reserve (South), California.

STEPHEN H. DOUGLAS, Deputy Forest Ranger to Forest Ranger, Santa Barbara Forest Reserve, California.

CARL STODDARD, JOHN B. LIBEU, GEORGE A. BALD, EDGAR B. DAVISON, R. G. H. FORSYTH, A. D. MARTIN, ROBERT H. MILLER, HENRY W. MUZZALL, GERARD V. REYES, JACINTO D. REYES, Assistant Forest Rangers to Deputy Forest Rangers, Santa Barbara Forest Reserve, California.

FRANK C. LILLIE, Deputy Forest Ranger, Trabuco Canyon Forest Reserve, California.

NEIL ERICKSON, BERT COSPER, Assistant Forest Rangers to Deputy Forest Rangers, Chiricahua Forest Reserve, Arizona.

LEWIS R. PYLE, FOREST HALE, Assistant Forest Rangers to Deputy Forest Rangers, Tonto Forest Reserve, Arizona.

CHARLES H. HINDERER, ROSCOE G. WILLSON, ARTHUR H. ZACHAU, Assistant Forest Rangers to Deputy Forest Rangers, Prescott Forest Reserve, Arizona.

P. A. FENTON, Forest Ranger, Grand Canyon Forest Reserve (South), Arizona.

D. C. MARTIN, Deputy Forest Ranger to Forest Ranger, Black Mesa Forest Reserve, Arizona.

D. I. PENROD, WILLIAM H. ROPER, DAVIS B. RUDD, JOHN HALL, Jr., Assistant Forest Rangers to Deputy Forest Rangers, Black Mesa Forest Reserve, Arizona.

G. B. CHAPIN, Deputy Forest Ranger, Black Mesa Forest Reserve, Arizona.

JAMES F. WESTFALL, Assistant Forest Ranger to Deputy Forest Ranger, Santa Catalina Forest Reserve, Arizona.

GEORGE F. CAMPBELL, Deputy Forest Ranger to Deputy Forest Supervisor, San Francisco Mountains Forest Reserve, Arizona.

J. W. McLAIN, LEWIS BENEDICT, LEWIS E. JOHNSON, WILLIAM A. PHELPS, W. F. WALLACE, Deputy Forest Rangers to Forest Rangers, San Francisco Mountains Forest Reserve, Arizona.

J. P. WILSON, WILLIAM M. RUDD, JR., WILLIAM H. POWER, ALEX J. MACKAY, FRED PLATTEN, R. L. NEILL, J. J. FISHER, WILLIAM A. CAMPBELL, JAMES D. BAILEY, WILLARD L. SEVIER, Deputy Forest Rangers, San Francisco Mountains Forest Reserve, Arizona.

R. L. NEILL, JAMES D. BAILEY, from Forest Guards to Deputy Forest Rangers; FRED PLATTEN, J. J. FISHER, WILLIAM A. CAMPBELL, WILLIARD L. SEIVER, from Assistant Forest Rangers to Deputy Forest Rangers, San Francisco Mountains Forest Reserve.

HENRY IRELAND, Deputy Forest Ranger to Forest Ranger, Blue Mountains Forest Reserve (West), Oregon.

WILLIAM E. BERRY, Assistant Forest Ranger to Deputy Forest Ranger, Blue Mountains Forest Reserve (East), Oregon.

MILTON J. ANDERSON, Deputy Forest Ranger to Forest Ranger, Cascade Forest Reserve (North), Oregon.

JOSEPH H. PROUT, ELMER W. GRIBBLE, WARREN M. COOPER, Assistant Forest Rangers to Deputy Forest Rangers, Cascade Forest Reserve (North), Oregon.

RALPH S. SHELLEY, Assistant Forest Ranger to Deputy Forest Ranger, Bull Run Forest Reserve, Oregon.

WILLIAM G. KROPKE, Assistant Forest Ranger to Deputy Forest Ranger, Ashland Forest Reserve, Oregon.

GUY M. INGRAM, Assistant Forest Ranger to Forest Ranger, Cascade Forest Reserve (South), Oregon.

J. ROY HARVEY, S. S. SWENNING, C. J. BINGHAM, Assistant Forest Rangers to Deputy Forest Rangers, Cascade Forest Reserve (South), Oregon.

THOMAS E. CHIDSEY, Assistant Forest Ranger to Forest Ranger, Heppner Forest Reserve, Oregon.

CHARLES BLACK, Assistant Forest Ranger to Forest Ranger, Wallowa Forest Reserve, Oregon.

MARSHALL GIFFIN, Assistant Forest Ranger to Deputy Forest Ranger, Wallowa Forest Reserve, Oregon.

CLIFTON W. HUDSON, Assistant Forest Ranger to Forest Ranger, Madison Forest Reserve, Montana.

WILLIAM H. MCCOY, Assistant Forest Ranger to Deputy Forest Ranger, Madison Forest Reserve, Montana.

WILLIAM H. DAUGS, PETER DE GROOT, FRANK F. LIEBIG, Assistant Forest Ranger, to Deputy Forest Rangers, Lewis and Clark Forest Reserve (North), Montana.

HORATIO M. BUTLER, Assistant Forest Ranger to Deputy Forest Ranger, Bitter Root Forest Reserve, Montana.

WELLMAN HOLBROOK, WALLACE S. PERRINE, Assistant Forest Rangers to Forest Rangers, Little Belt Forest Reserve, Montana.

RALPH J. EVELETH, THOMAS G. MYERS, FRANK R. SERVOS, ALVA J. VINTON, Assistant Forest Rangers to Deputy Forest Rangers, Little Belt Forest Reserve, Montana.

JAMES BLACKHALL, Forest Ranger, Medicine Bow Forest Reserve (Wyoming Division), Wyoming.

JOHN H. MULLISON, Deputy Forest Ranger to Forest Ranger, Medicine Bow Forest Reserve (Wyoming Division), Wyoming.

JOHN REID, GEORGE H. MULLISON, Assistant Forest Rangers to Deputy Forest Rangers, Medicine Bow Forest Reserve (Wyoming Division), Wyoming.

FRANK A. KUENY, Forest Ranger, Big Horn Forest Reserve, Wyoming.

R. D. McDONALD, Deputy Forest Ranger to Forest Ranger, Big Horn Forest Reserve, Wyoming.

AUGUST HETTINGER, ARTHUR SNYDER, L. N. MCCREERY, CHARLES A. DAVIS, Assistant Forest Rangers to Deputy Forest Rangers, Big Horn Forest Reserve, Wyoming.

R. L. SMITH, JOHN RAPHAEL, HUGH McDERMENT, CHARLES W. LEE, ERNEST S. EDGERTON, JOHN D. ALSOP, Assistant Forest Rangers to Deputy Forest Rangers, Yellowstone Forest Reserve (Teton Division), Wyoming.

HARRY W. THURSTON, JESSE W. NELSON, Forest Rangers, Yellowstone Forest Reserve (Shoshone Division), Wyoming.

CLARENCE B. SWIM, JOHN H. RUFF, CHARLES G. POOLE, EDGAR E. MORTIMORE, ED. H. HEAVEY, CHARLES H. ANDERSON, Assistant Forest Rangers to Deputy Forest Rangers, Yellowstone Forest Reserve (Shoshone Division), Wyoming.

SILAS W. YARNALL, ARTHUR C. ROBERTS, HENRY C. HALL, GEORGE M. GLOVER, Assistant Forest Rangers to Deputy Forest Rangers, Yellowstone Forest Reserve (Wind River Division), Wyoming.

JAMES LEATHAM, Assistant Forest Ranger to Deputy Forest Ranger, Bear River Forest Reserve, Idaho.

JESSE W. ADAMSON, DAVID LAING, Assistant Forest Rangers to Deputy Forest Rangers, Payette Forest Reserve, Idaho.

DAVID COOLIN, Deputy Forest Ranger to Forest Ranger, Priest River Forest Reserve, Idaho.

SAMUEL T. DAVIS, RAY MCKENZIE, Assistant Forest Rangers to Deputy Forest Rangers, Priest River Forest Reserve, Idaho.

M. A. WICKERSHAM, Assistant Forest Ranger to Forest Ranger, Sawtooth Forest Reserve, Idaho.

H. G. MCPHETERS, Assistant Forest Ranger to Deputy Forest Ranger, Sawtooth Forest Reserve, Idaho.

A. B. CONRAD, Assistant Forest Ranger to Deputy Forest Ranger, Mount Rainier Forest Reserve, Washington.

SPENCER A. BLANKENSHIP, OTTO O. GREEN, Assistant Forest Rangers to Deputy Forest Rangers, Wenaha Forest Reserve, Washington.

CHRIST MORGENROTH, Deputy Forest Ranger to Forest Ranger, Olympic Forest Reserve, Washington.

E. E. FISHEL, PAUL LAUFIELD, Assistant Forest Rangers to Deputy Forest Rangers, Olympic Forest Reserve, Washington.

CHARLES W. ARMSTRONG, Deputy Forest Ranger to Forest Ranger, Washington Forest Reserve (West), Washington.

CALVIN L. FARRAR, OLIVER S. COLEMAN, Assistant Forest Rangers to Deputy Forest Rangers, Washington Forest Reserve (West), Washington.

E. H. SMITH, Assistant Forest Ranger to Deputy Forest Ranger, Dixie Forest Reserve, Utah.

BEAUREGARD KENNER, Forest Ranger, Fillmore Forest Reserve, Utah.

W. W. SMITH, Assistant Forest Ranger to Deputy Forest Ranger, Salt Lake Forest Reserve, Utah.

WALTER F. BROUGH, Assistant Forest Ranger to Deputy Forest Ranger, Payson Forest Reserve, Utah.

SAMUEL E. HENRIE, JAMES H. DE LONG, Assistant Forest Rangers to Deputy Forest Rangers, Beaver Forest Reserve, Utah.

WALLACE M. RIDDLE, FRANK W. SEAMAN, Assistant Forest Rangers to Deputy Forest Rangers, Sevier Forest Reserve, Utah.

AMBROSE SHURTZ, JOSEPH J. PORTER, Assistant Forest Rangers to Deputy Forest Rangers, Aquarius Forest Reserve, Utah.

ERNEST WINKLER, PARLEY CHRISTIANSEN, Assistant Forest Rangers to Deputy Forest Rangers, Manti Forest Reserve, Utah.

WILLIAM M. ANDERSON, Forest Ranger, Uinta Forest Reserve, Utah.

GRANT CARPENTER, GEORGE A. FISHER, J. CARL ALLRED, Assistant Forest Rangers to Deputy Forest Rangers, Uinta Forest Reserve, Utah.

JAMES H. KINNEY, Deputy Forest Ranger to Forest Ranger, Lincoln Forest Reserve, New Mexico.

ERNEST E. WRIGHT, PAUL F. GRIFFITH, Assistant Forest Rangers to Deputy Forest Rangers, Lincoln Forest Reserve, New Mexico.

T. R. STEWART, Deputy Forest Ranger to Forest Ranger, Pecos River Forest Reserve, New Mexico.

JOHN MUNDY, J. W. GLOSSBRENNER, A. H. DOUGLAS, Assistant Forest Rangers, Gila Forest Reserve, New Mexico.

SYDNEY E. MOYLLIE, JAMES V. SEAMAN, JOHN SHIELDS, Assistant Forest Rangers to Deputy Forest Rangers, White River Forest Reserve, Colorado.

ALBERT H. WILLIAMS, WILLIAM WALTER, Deputy Forest Rangers to Forest Rangers, Holy Cross Forest Reserve, Colorado.

JOHN McLAREN, Deputy Forest Ranger, Holy Cross Forest Reserve, Colorado.

ISAIAH W. FOSTER, Assistant Forest Ranger to Deputy Forest Ranger, Holy Cross Forest Reserve, Colorado.

THEODORE T. KINSEY, TRUMAN O. SMITH, ALFRED T. LEE, Assistant Forest Rangers to Deputy Forest Rangers, Medicine Bow Forest Reserve (Colorado Division), Colorado.

FRANK R. SHERWIN, JR., Deputy Forest Ranger to Forest Ranger, Pikes Peak Forest Reserve, Colorado.

L. D. CRANDELL, K. A. URQUHART, Assistant Forest Rangers to Deputy Forest Rangers, Pikes Peak Forest Reserve, Colorado.

WILLIAM B. KELSO, EDWIN D. HEPBURN, Deputy Forest Rangers, Pikes Peak Forest Reserve, Colorado.

NORMAN S. ASHLOCK, Assistant Forest Ranger to Forest Ranger, Holy Cross Forest Reserve, Colorado.

WILLIAM S. CYPHERS, Assistant Forest Ranger to Deputy Forest Ranger, Holy Cross Forest Reserve, Colorado.

SAMUEL H. CLAY, E. C. BUNKER, J. O. BUCKHOLZ, Assistant Forest Rangers to Deputy Forest Rangers, Leadville Forest Reserve, Colorado.

CHARLES E. WILLIAMS, CLARENCE A. MACK, Deputy Forest Rangers, Leadville Forest Reserve, Colorado.

E. N. KAVANAGH, WILLIAM H. HAZZARD, Assistant Forest Rangers to Deputy Forest Rangers, Leadville Forest Reserve, Colorado.

FRANK A. BLAIR, Deputy Forest Ranger, Leadville Forest Reserve, Colorado.

C. W. SHELLABARGER, O. S. MACKELFRESH, Assistant Forest Rangers to Deputy Forest Rangers, Wet Mountains Forest Reserve, Colorado.

A. H. HOFFMAN, GEORGE H. CRESS, FRANK H. WAGNER, Assistant Forest Rangers to Deputy Forest Rangers, San Isabel Forest Reserve, Colorado.

ROY R. WHITE, JOSEPH M. MELROSE, JAMES J. LOWELL, JAMES BENNETT, Assistant Forest Rangers to Deputy Forest Rangers, Montezuma Forest Reserve, Colorado.

CHARLES W. PACE, EDWARD N. VANCE, ROBERT N. UNDERWOOD, PERRY L. SNODGRASS, Assistant Forest Rangers to Deputy Forest Rangers, Gunnison Forest Reserve, Colorado.

H. C. HURD, JAMES H. RATLIFF, Assistant Forest Rangers to Deputy Forest Rangers, Park Range Forest Reserve, Colorado.

ERNEST W. SHAW, Assistant Forest Ranger to Forest Ranger, San Juan Forest Reserve, Colorado.

DAVID E. FITTON, A. L. STRAWN, J. W. MELROSE, C. A. WHITNEY, E. E. CHAPSON, CLARENCE E. BRADT, Assistant Forest Rangers to Deputy Forest Rangers, San Juan Forest Reserve, Colorado.

CHARLES E. McMULLIN, Assistant Forest Ranger to Forest Ranger, Uncompahgre Forest Reserve, Colorado.

HENRY L. SPENCER, Assistant Forest Ranger to Forest Ranger, Uncompahgre Forest Reserve, Colorado.

THOMAS E. JACQUES, Assistant Forest Ranger to Deputy Forest Ranger, Uncompahgre Forest Reserve, Colorado.

J. W. LOWELL, Jr., B. J. DUFFY, W. W. BOROM, Assistant Forest Rangers to Deputy Forest Rangers, Battlement Mesa Forest Reserve, Colorado.

CARL J. STAHL, Deputy Forest Ranger to Forest Ranger, Cochetopa Forest Reserve, Colorado.

LESLIE ALEXANDER, JOHN CLINE, JOSEPH M. CUENIN, CHARLES N. MILLER, Assistant Forest Rangers to Deputy Forest Rangers, Cochetopa Forest Reserve, Colorado.

RESTORED FROM FURLOUGH.

Reserve Organization—

EDWARD G. STAHL, Assistant Forest Ranger, Lewis and Clark Forest Reserve (North), Montana.

S. A. BLANKENSHIP, Assistant Forest Ranger, Wenaha Forest Reserve, Washington.

TRANSFERRED.

Reserve Organization—

R. B. WILSON, Forest Assistant, from Reserve Boundaries to Cascade (North) and Bull Run forest reserves, Oregon.

JAMES H. KINNEY, Forest Ranger, from Lincoln Forest Reserve, New Mexico, to Reserve Boundaries.

H. J. BROWN, Forest Assistant, from Sierra Forest Reserve (North), California, to Minnesota Forest Reserve, Minnesota.

WILLARD M. DRAKE, Forest Assistant, from Washington Forest Reserve (West), Washington, to San Francisco Mountains Forest Reserve, Arizona.

C. J. BUCK, Forest Assistant, from Klamath Forest Reserve, California, to Reserve Boundaries.

FRED D. WHITNEY, Forest Ranger, from Pikes Peak Forest Reserve to Reserve Boundaries.

C. W. FITZGERALD, from Department of Commerce and Labor to Reserve Boundaries.

FURLOUGHED.

Reserve Organization—

CLARENCE N. WOODS, Forest Ranger; GLIDDEN J. BARSTOW, Assistant Forest Ranger; BENJ. F. BONDURANT, Assistant Forest Ranger; WILLIAM J. BARR, Assistant Forest Ranger; JOHN D. ALSOP, Forest Ranger; GEORGE W. BOOKER, Assistant Forest Ranger; and FRED GRAHAM, Assistant Forest Ranger, Yellowstone Forest Reserve (Teton Division), Wyoming.

WILLIAM D. FUNK, Deputy Forest Ranger, Sevier Forest Reserve, Utah.
 E. B. ZUMWALT, Assistant Forest Ranger, Sierra Forest Reserve (South), California.
 WILLIAM H. HAZZARD, Deputy Forest Ranger, Leadville Forest Reserve, Colorado.
 GEO. W. BROADHURST, Assistant Forest Ranger, Medicine Bow Forest Reserve, Wyoming.

L. A. SWALLOW, Assistant Forest Ranger, San Isabel Forest Reserve, Colorado.

B. E. MATSSON, Assistant Forest Ranger, Manti Forest Reserve, Utah.

J. P. BROCKBANK, Assistant Forest Ranger, Manti Forest Reserve, Utah.

RESIGNED.

Forest Management—

R. W. WALKER, Forest Student.

H. G. CALKINS, Forest Student.

B. G. GOLDSMITH, Forest Student.

Dendrology—

GEO. A. JOHNSON, Collaborator.

Reserve Organization—

THOMAS F. MEAGHER, Forest Supervisor, Santa Rita and Santa Catalina forest reserves, Arizona.

A. L. CHESHER, Ranger in Charge, Portales Forest Reserve, New Mexico.

G. E. CLEMENT, Forest Assistant, Weiser Forest Reserve, Idaho.

HUGH McDERMENT, Deputy Forest Ranger, Yellowstone Forest Reserve (Teton Division), Wyoming.

D. S. BROCK, Forest Guard, Shasta Forest Reserve, California.

HARRY GIBLER, Forest Ranger, Park Range Forest Reserve, Colorado.

RALPH L. BATEMAN, Forest Guard, Gila Forest Reserve, New Mexico.

J. C. DEXTER, Assistant Forest Ranger, Jemez Forest Reserve, New Mexico.

PHILIP JAGELS, Assistant Forest Ranger, Gila Forest Reserve, New Mexico.

E. K. STRONG, Jr., Assistant Forest Ranger, Sierra Forest Reserve (North), California.

STEPHEN P. TRATHEN, Assistant Forest Ranger, Black Hills Forest Reserve, South Dakota.

LEWIS C. TILGHMAN, Assistant Forest Ranger, San Gabriel Forest Reserve, California.

ALLEN H. HODGSON, Forest Guard, Shasta Forest Reserve, California.

J. W. JORGENS, Assistant Forest Ranger, Weiser Forest Reserve, Idaho.

SEPARATED.

Reserve Organization—

ROBERT L. PELZ, Forest Guard, Black Hills Forest Reserve, South Dakota.

THEODORE SHOEMAKER, Forest Guard, Black Hills Forest Reserve, South Dakota.

HYRUM PARSONS, Forest Guard, Yellowstone Forest Reserve (Teton Division), Wyoming.

AARON SNYDER, Forest Guard, Cascade Forest Reserve (North), Oregon.

WILLIAM B. HOGE, Forest Guard, Bear River Forest Reserve, Idaho.

CLAUDE S. HARRISON, Forest Guard, San Francisco Mountains Forest Reserve, Arizona.

THOMAS H. PARKER, Forest Guard, Blue Mountains Forest Reserve (East), Oregon.

F. L. PARTRIDGE, Forest Guard, Sierra Forest Reserve (North), California.

SERVICE NOTES FOR FEBRUARY, 1907.

OFFICE OF LAW.

The agricultural appropriation bill, as reported by the House Committee on Agriculture, provides:

That forest reserves shall be hereafter known as national forests; that the Secretary of Agriculture may fix the names and designate the boundaries of national forests; that moneys may be received as contributions toward cooperative work in the protection and improvement of the national forests and expended for that purpose; that fish and game supplied to stock the national forests or the waters therein may be transported and cared for by the Forest Service; that technical books and periodicals for circulating libraries for officers of the Forest Service stationed outside of Washington may be purchased; that the Forester may procure an official seal for the authentication of the records of the Forest Service; and that \$5,000,000 in addition to the appropriation for salaries and general expenses shall be immediately available to construct permanent improvements for the proper and economical administration, protection, and development of the national forests.

A bill (S. 7618) for control of grazing upon the public domain was introduced by Senator Burkett on January 8. The advice of the Forest Service was sought in drafting this bill.

Claims.

The geologists of the Geological Survey who have been examining alleged illegal mining claims in the Prescott Reserve, Arizona, have been prevented from concluding their work in that reserve by unexpected snows. Similar climatic conditions have prevented them from taking up the work in the Jemez, Pecos River, and Lincoln reserves, New Mexico. They have been sent to the Chiricahua Reserve, Arizona, and when the examination in this reserve is completed they will proceed to any other reserves in Arizona or New Mexico where climatic conditions will permit work upon the ground.

Trespass.

J. P. Richards was indicted December 8, 1906, for grazing trespass on the Black Mesa Forest Reserve. The trial has been set for June term of the district court.

Domingo Odeaga has been indicted for grazing trespass on the Sawtooth Reserve and will probably be tried at the March term.

A warrant has been issued for the arrest of George McCarthy, who was recently convicted of illegally maintaining a fence on the Pikes Peak Forest Reserve, for failing to remove his fence as he had promised.

In the following case an offer of settlement of civil damages has been accepted:
Scorup, grazing trespass, Fish Lake Forest Reserve.

In the following cases the orders of the Forester have been obeyed and further proceedings discontinued:

Carey, ejectment, Wichita Forest Reserve; Hotchkiss, privilege trespass (fence), Warner Mountains Forest Reserve; Sabado, grazing trespass, Jemez Forest Reserve.

Privileges.

The following important special privilege permits were issued by the Forester between December 20 and January 15:

American River Electric Company, reservoir, Tahoe Reserve, California.

Salt Lake Public Service Company, reservoir; dam, pipe line, and power house; dam and pipe line; pipe line and settling basin, and transmission line; all in the Salt Lake Reserve, Utah.

The following right of way cases, referred from the Department of the Interior to the Forester for report as to whether the projects would interfere with forest-reserve interests, were returned to that Department between December 20 and January 15 with favorable reports by the Forester:

G. H. Howard, reservoir; Jemez Reserve, New Mexico; William Wilcox, reservoir, Madison Reserve, Montana; Battlement Mesa Ditch and Reservoir Company and Weir & Johnson, reservoirs, Battlement Mesa Reserve, Colorado.

OFFICE OF FOREST MANAGEMENT.

Comparative Scale Record Books.

The comparative scale record books mentioned on page 116 of the Use Book are for the use of check scalers, assistant lumbermen, and inspectors, only, and will not be supplied to supervisors.

Cooperative Work.

The work of the Forest Service in California, undertaken in cooperation with the State, is now nearly finished. The field work in the study of cut-over lands is completed, and a market study of redwood, now in progress, will be completed by early spring.

The agricultural experiment station of Delaware has requested the Forest Service to make a study of forest conditions in the State and to work out a State forest policy. The necessary field work will probably be started toward the close of the winter or early in the spring.

The preparation of a working plan for a tract of 70,000 acres in Arkansas has been undertaken by the service in cooperation with the owners. The tract consists almost wholly of shortleaf and loblolly pines. The work, which will be under the direction of S. J. Record, will aim chiefly at devising plans for fire protection and conservative lumbering, with a view to a continuous annual supply of timber.

Fuel Wood.

All the Forest Supervisors in Montana, Wyoming, and Idaho have been telegraphed to do everything in their power to relieve the fuel famine. Every facility is given the ranchers to obtain wood promptly.

Silvics.

Silvical notes upon the following trees are now on file and may be had by forest officers upon application:

CONIFERS.

Bristle-cone pine (<i>Pinus aristata</i>).	White pine (<i>Pinus strobus</i>).
California swamp pine (<i>Pinus muricata</i>).	White-bark pine (<i>Pinus albicaulis</i>).
Coulter pine (<i>Pinus coulteri</i>).	European larch (<i>Larix europæa</i>).
Cuban pine (<i>Pinus heterophylla</i>).	Western larch (<i>Larix occidentalis</i>).
Four-leaf piñon (<i>Pinus quadrifolia</i>).	Engelmann spruce (<i>Picea engelmanni</i>).
Foxtail pine (<i>Pinus balfouriana</i>).	Norway spruce (<i>Picea excelsa</i>).
Grey pine, digger pine (<i>Pinus sabiniana</i>).	Sitka spruce (<i>Picea sitchensis</i>).
Jeffrey pine (<i>Pinus jeffreyi</i>).	Black hemlock (<i>Tsuga mertensiana</i>).
Knobcone pine (<i>Pinus attenuata</i>).	Western hemlock (<i>Tsuga heterophylla</i>).
Limber pine (<i>Pinus flexilis</i>).	Douglas spruce (<i>Pseudotsuga taxifolia</i>).
Lodgepole pine (<i>Pinus murrayana</i>).	Amabilis fir (<i>Abies amabilis</i>).
Longleaf pine (<i>Pinus palustris</i>).	Noble fir (<i>Abies nobilis</i>).
Monterey pine (<i>Pinus radiata</i>).	White fir (<i>Abies concolor</i>).
Pitch pine (<i>Pinus rigida</i>).	Incense cedar (<i>Libocedrus decurrens</i>).
Red pine (<i>Pinus resinosa</i>).	Arborvitæ (<i>Thuja occidentalis</i>).
Scotch pine (<i>Pinus sylvestris</i>).	Giant arborvitæ (<i>Thuja plicata</i>).
Scrub pine (<i>Pinus virginiana</i>).	Port Orford cedar (<i>Chamaecyparis lawsoniana</i>).
Single leaf piñon (<i>Pinus monophylla</i>).	White cedar (<i>Chamaecyparis thyoides</i>).
Sugar pine (<i>Pinus lambertiana</i>).	Yellow cedar (<i>Chamaecyparis nootkatensis</i>).
Torrey pine (<i>Pinus torreyana</i>).	Red cedar (<i>Juniperus virginiana</i>).
Western white pine (<i>Pinus monticola</i>).	Western juniper (<i>Juniperus occidentalis</i>).
Western yellow pine (<i>Pinus ponderosa</i>).	California torreyia (<i>Tumion californicum</i>).

HARDWOODS.

Black walnut (<i>Juglans nigra</i>).	Chestnut (<i>Castanea dentata</i>).
Bitternut hickory (<i>Hicoria minima</i>).	California black oak (<i>Quercus californica</i>).
Mockernut hickory (<i>Hicoria alba</i>).	Red oak (<i>Quercus rubra</i>).
Nutmeg hickory (<i>Hicoria myristicaeformis</i>).	Tanbark oak (<i>Quercus densiflora</i>).
Pecan (<i>Hicoria pecan</i>).	White elm (<i>Ulmus americana</i>).
Pignut (<i>Hicoria glabra</i>).	Yellow poplar (<i>Liriodendron tulipifera</i>).
Shagbark hickory (<i>Hicoria ovata</i>).	Black locust (<i>Robinia pseudacacia</i>).
Shellbark hickory (<i>Hicoria laciniosa</i>).	Oregon maple (<i>Acer macrophyllum</i>).
Water hickory (<i>Hicoria aquatica</i>).	Basswood (<i>Tilia americana</i>).
Aspen (<i>Populus tremuloides</i>).	Black ash (<i>Fraxinus nigra</i>).
Balm of Gilead (<i>Populus balsamifera</i>).	Blue ash (<i>Fraxinus quadrangulata</i>).
Black cottonwood (<i>Populus trichocarpa</i>).	European ash (<i>Fraxinus excelsior</i>).
Cottonwood (<i>Populus deltoides</i>).	Green ash (<i>Fraxinus lanceolata</i>).
Large-tooth aspen (<i>Populus grandidentata</i>).	Red ash (<i>Fraxinus pennsylvanica</i>).
Swamp cottonwood (<i>Populus heterophylla</i>).	White ash (<i>Fraxinus americana</i>).
White poplar (<i>Populus alba</i>).	

OFFICE OF DENDROLOGY.

Additions to the Range of Forest Trees.

Lodgepole pine (*Pinus contorta*).—Observations made in 1898 by W. A. Langille, Forest Supervisor of the Alaska forest reserves, but hitherto unpublished, extend the range of lodgepole pine about 40 miles farther northwestward than previously known, to the divide between the Klondike and McQuestion rivers, 80 miles east of Dawson, latitude 64°. The previously recorded limit of its range in the Yukon River country was the vicinity of Fort Selkirk, latitude 63°. In 1905 J. Keele found lodgepole pine in latitude 64°, 40 miles east of Supervisor Langille's station, on Mayo River, a tributary of Stewart River, and on Mayo Lake.

Western white pine (*Pinus monticola*) and *limber pine* (*P. flexilis*).—Recent observations by members of the Service and by others have considerably extended the ranges of these pines. Before 1905 Kearsarge Pass was the southernmost point recorded for the limber pine in the Sierra Nevada, and latitude 36° 25', on the ridge between the Big and Little Kern rivers, was the southern limit of western white pine.

In that year, however, George B. Sudworth found a large body of limber pine extending from Lone Pine Trail south to Monache Peak on the eastern slope of the Sierras, and also observed western white pine southward to latitude $36^{\circ} 10'$, on the divide between Kern River and its south fork.

In the southern cross ranges of California these pines have been found only recently. Limber pine was noted in 1899 by J. B. Leiberger in the Sierra Madre, San Bernardino, and San Jacinto mountains, and in 1904 by E. A. Sterling, F. G. Plummer, and M. G. Gowsell, of the Forest Service, on Mount Piños, Ventura County, and by L. Abrams on the summit of San Geronimo and Santa Rosa mountains; while western white pine was lately noted by T. P. Lukens in the San Bernardino and San Jacinto mountains, and by A. J. McClatchie on Mount Wilson, in the Sierra Madre.

In northern California Miss Alice Eastwood announced the finding of western white pine in the Trinity Mountains, at the head of Canyon Creek, Trinity County, in 1902.

More information is needed from Montana and Idaho concerning the range of these two pines. Western white pine was formerly supposed to be found only west of the Continental Divide, and limber pine only east of it; but in 1904 J. B. Leiberger noted western white pine in southwestern Montana on the bottoms of Davis Creek, a tributary of West Boulder River, and of Slough Creek (T. 12 S., R. 12 E.), east of the Continental Divide, at elevations of from 6,000 to 8,000 feet. Limber pine was found west of the divide in 1903 by H. P. Baker, of the Forest Service, at 9,600 feet elevation, in the Sawtooth Range, central Idaho, at the head of Mattingly Creek, a branch of the Middle Boise River, and by G. E. Tower, of the Forest Service, in the same mountains on the East Fork of Big Lost River (10,000 feet elevation), and in the Pahsimeroi Mountains on the Middle Fork of the Pahsimeroi River (9,500 feet elevation). In the latter locality the tree had previously been observed by Dr. C. Hart Merriam in 1891. In 1904 this tree was reported on the Pacific slopes of the Bitter Root Mountains at from 6,000 to 8,000 feet elevation by L. H. Pammel.

It should be looked for in the Henrys Lake Reserve region and elsewhere. Careful observations, accompanied by specimens of foliage and cones for identification, are urgently needed.

Macnab cypress (*Cupressus macnabiana*).—In November, 1906, J. C. La Plant, Forest Ranger on the Lassen Peak Reserve, California, discovered a small grove, at the base of Lassen Buttes, of what proved to be this rare California species. This is 70 miles farther north than any of the other Sierra groves. The tree was identified from specimens sent to the Office of Dendrology by Forest Assistant A. R. Powers.

It has just been reported by R. B. Wilson, of the Forest Service, that in 1903, A. B. Patterson, of the Forest Service, found the Macnab cypress on Seiad Creek, Siskiyou County, California, about 10 miles up from the Klamath River at the western extremity of the Siskiyou Mountains. This is about 150 miles northwest of the Lassen Buttes grove, and more than 200 miles north of the groves discovered long ago in Napa and Lake counties. Intervening groups must exist, but none are now known.

Madroña (*Arbutus menziesii*).—Little is known concerning the distribution of the madroña in the California Sierras. The first reported discovery of this tree east of the coast ranges was by George B. Sudworth in 1899. It was then found in some of the valleys of the middle timber belt of the Stanislaus Reserve; in greater abundance and of large size on the headwaters of Sutter, Pioneer, Mill, and Jesus Maria creeks, and smaller and less abundantly on Empire Creek, between Garden Valley and Georgetown, and on Otter Creek, a tributary of the Middle Fork of American River. Madroña has also been found by J. B. Leiberger on lateral canyons of the North Fork of Feather River, and recently by Elers Koch, of the Forest Service, in the western yellow pine belt of the Mount Shasta Forest Reserve, northern California.

It is remarkable that this tree, known for over eighty years in the coast country, should have been so long undiscovered in the Sierras. The few existing records of its presence there have hitherto been practically unnoticed. Members of the Forest Service are urged to search for and report further possible extensions of the range.

Assignment of Books to Field Forest Officers.

The first installment of books to be assigned to the offices of forest supervisors is being forwarded to these officers, and others will soon be added. Instructions for the use of the books are given below. It is hoped that supervisors and other members of the Service will freely offer suggestions for bettering or supplementing these instructions.

CARE AND USE OF BOOKS.

Books filed in the offices of supervisors are for the special use of supervisors in connection with their official duties and also for the use of all reserve officers working under their direction. Supervisors are held responsible for the care and proper use of all books placed in their charge.

A book may be drawn from the office of a supervisor by any member of his corps for a period of one month, with the privilege of renewal, provided that in the judgment of the supervisor such renewal will not deprive other members of his corps of an equal use of the book.

When a book is not needed for the full time allotted it should be returned promptly to the supervisor's office, so as to permit others to draw it.

The supervisor may permit a book to be retained for a longer period than one month without renewal, whenever in his judgment it may be advantageous to do so, or whenever, on account of isolation through storm, snow, or distance, enforcement of the general rule would entail long travel or uncommon hardship.

Before a book is taken from the supervisor's office, the charge card, pocketed on the inside of the back cover of the book, should be signed and dated by the borrower on the first blank line, and left with the supervisor until the book is returned. The date of return should be stamped or written over the borrower's name, and the card returned to its pocket in the book. One card can be used 18 times. When the old cards are filled, new ones will be furnished on application to the Forester.

The supervisor is to hold the officer to whom a book is charged responsible for its proper care and use. The loss or destruction of any book is to be reported at once by the supervisor to the Forester, with full particulars and recommendations for action. Steps will then be taken either to relieve the field officer from the responsibility of the loss and to replace the book, or to require him to restore the book at his own expense.

Books are assigned to field stations to be used to the fullest extent for the benefit of the work of the Service. Due allowance will be made for the harder usage books must necessarily undergo in field use, but officers in charge of or using books in the field are expected to see to it that they are not unnecessarily abused.

At the end of each fiscal year supervisors are requested to return to the Forester all of the charge cards used during the year, in order that a knowledge may be gained of the extent to which the books assigned to their offices have been drawn. It is desired also that supervisors submit, with the return of these cards, any suggestions they may wish to make for increasing the usefulness of field libraries to reserve officers.

Accessions to the Library—Compiled by the Librarian.

Encyclopedias, Dictionaries, and Calendars.

Forst- und Jagd-Kalender, Jahrgang 35, zweiter Teil (Forest and hunting calendar, vol. 35, pt. 2). 1907. 888 p. (J. Springer, Berlin.)

Forest Botany.

Familiar trees; G. S. Boulger. Vol. 1, 1906. Illus. (Cassell & Co. (Limited), London. 6s.)

Silvics.

La forêt accumulatrice d'azote (The forest as an accumulator of nitrogen); E. Henry.

Waldbauliche Studien über den Nussbaum und die Edelkastanie (Silvicultural studies of the walnut and chestnut); E. Böhmerle. 1906. Illus. (W. Frick, Wien.)

Rainfall.

Forests considered in their relation to rainfall and the conservation of moisture; J. H. Maiden. 1902. 30 p. (Royal society of New South Wales, Sydney.)

Stream Flow.

Notes on the influence of forests on the storage and regulation of the water supply; S. Eardley-Wilmot. 1906. 58 p. Illus. (India—Forest department. Forest bulletin No. 9.)

Educational.

Ansbildung und Prüfung von Privatforstbeamten in Deutschland (Education and examination of private forest officers in Germany); M. Lincke. 180 p. (J. Neumann, Neudamm. 2.40 M.)

Classified list of publications available for distribution January 1, 1907; Forest Service. 4 p.

Forest Management.**Lumbering.**

Rules and specifications for the grading of lumber adopted by the various lumber manufacturing associations of the U. S.; E. R. Hodson. 1906. 127 p. (Forest Service bulletin 71.)

Planting.

Forest planting in eastern Nebraska; F. G. Miller. 1906. 32 p. (Forest Service circular 45.)

Organization and Administration.

Maine—Forest commissioner. 6th report, 1906. 219 p. Illus. (Augusta.)

Contents of special interest.

Forest fires; E. E. Ring.

Description of some of our native trees; E. E. Ring.

Study of forestry at the University of Maine; G. E. Fellows.

Investigation on a tract of State forest land in eastern Maine; G. E. Tower.

Second-growth white pine in Maine; S. N. Spring.

New York forest, fish, and game commission. 8th-9th annual reports, 1902-3. 456 p. Illus. (Albany, N. Y.)

Contents of special interest.

Report of superintendent of forests, 1902 and 1903.

Dead and diseased trees in Flushing and Port Jefferson, L. I.; A. Knechtel.

Gathering spruce seed; C. R. Pettis.

The cultivated forests of Europe; A. Knechtel.

Forest nurseries and nursery methods in Europe; W. F. Fox.

Birds as the conservators of the forest; F. E. L. Beal.

Working plan for townships 5, 6, and 41, N. Y. state forest preserve; R. S. Hosmer and E. S. Bruce.

Forest Reserves.

Location, date of proclamation in force, and area of the national forest reserves in the United States, Alaska, and Porto Rico, Jan. 1, 1907; Forest Service. 4 p.

Utilization.

Holding force of railroad spikes in wooden ties; W. K. Hatt. 1906. 7 p. Illus. (Forest Service circular 46.)

Technology.

Effect of moisture upon the strength and stiffness of wood; H. D. Tiemann. 1906. 144 p. Illus. (Forest Service bulletin 70.)

Kiln-drying hardwood lumber; F. Dunlap. 1906. 19 p. (Forest Service circular 48.)

Strength of packing boxes of various woods; W. K. Hatt. 1906. 8 p. Illus. (Forest Service circular 47.)

Statistics.

The lumber cut of the United States in 1905; R. S. Kellogg. 1906. 23 p. (Forest Service circular 52.)

Timber used in the mines of the United States in 1905; R. S. Kellogg. 1906. 8 p. (Forest Service circular 49.)

Street and Park Trees.

Ornamental and shade trees; P. B. Kennedy. 1906. 61 p. Illus. (Nevada—Agricultural experiment station, Reno. Bulletin 61.)

Forest Enemies.**Forest Insects.**

The cottony maple scale; S. A. Johnson. 1906. 16 p. Illus. (Colorado—Agricultural experiment station, Fort Collins. Bulletin 116.)

Two insect pests of the elm; A. L. Melander. 1906. 7 p. Illus. (Washington—Agricultural experiment station, Pullman. Bulletin 74.)

Grazing.

Essai sur le pâturage dans les bois (Essay on grazing in the forest); Desjobert.

OFFICE OF FOREST EXTENSION.**Rangers' Nurseries.**

A recent report by Assistant Forest Inspector Richard P. Imes, of the Black Hills Forest Reserve, shows that there are 400 pounds of western yellow pine seed on hand, collected in 1905. Recommendations are made for the use of this seed in experimental broadcast sowing, which has previously proved successful in the burnt-over region east of Custer Peak. It is believed that better success can be had by sowing about March 15, instead of in early June, as was done in previous years. The report recommends the establishment of at least four rangers' nurseries on the Black Hills Reserve during the coming spring, and suggests that attempts be made to grow seedlings without the use of shade frames.

Planting Stations.

A recent report by G. W. Peavy indicates that the field planting in the Santa Barbara Reserve last March was eminently successful. About 30,000 trees were planted on selected sites in the Santa Ynez watershed. Of this number, 44 per cent were alive on November 15. This result is particularly striking, since seven different species were used. The experiments show that careful selection of sites for the various species will do much to insure success. Of the seven species, incense cedar shows 82 per cent of live trees on November 15. The success with this species is attributed to the fact that these seedlings were planted in canyons and on north slopes, where conditions were extremely favorable. The average height of all the species planted was from 9 to 20 inches, and all the failures are attributed to drought.

Watershed Studies.

J. D. Guthrie has completed the investigation of the drainage basins in the Tonto Reserve, tributary to the Roosevelt Reservoir in Arizona, where he finds conditions very unfavorable to tree growth. Limited planting with hardwood species along streams is the first step recommended.

Reserve Planting.

Experimental plantations will be established in the San Luis Obispo Reserve this winter. Watershed improvement and timber production are the objects sought. The 25,000 trees used will be supplied from the Henninger's Flat Nursery.

State Cooperation.

A plan has recently been prepared by S. J. Flintham, in cooperation with the State of California, for planting on the cut-over redwood lands of the Union Lumber Company. This company controls extensive holdings in Mendocino County near Fort Bragg, and at the present rate of cutting have redwood timber

sufficient to last from eighty to ninety years. The cut-over land, however, grows up to brush, and it is desired that it be restocked. Eucalyptus is the most rapid-growing species of commercial value, and the plan provides for a division of the cut-over land into planting sites, and contains definite recommendations for clearing and planting. Provision has also been made for the protection of the plantations from fire and for extensive planting of windbreaks for harbor protection. The company will raise the necessary seedlings in a nursery which will be established near Fort Bragg this winter under the supervision of the State Forester.

The whole project strikingly shows the awakened interest in California in eucalyptus planting for commercial timber production.

OFFICE OF FOREST PRODUCTS.

Fence Post Treatments.

H. F. Weiss has completed experimental treatments of lodgepole pine and aspen fence posts on Henrys Lake Forest Reserve. It has been demonstrated that round posts of these species can easily be made to receive a cheap and effective treatment which will greatly prolong their length of service and so render them more valuable than untreated posts of the more expensive species. An open tank, capable of holding about 50 posts and equipped with steam coils, or so arranged that fire can be placed underneath, is all the apparatus necessary to begin the treatments on a small scale. The work will be carried on by a local company on a commercial basis.

There are many sections throughout the Mississippi Valley and Rocky Mountain States where there is urgent need for such a treatment for fence posts and telephone poles of cheap but quickly decaying species, and it is planned to extend the work to other reserves as rapidly as possible.

Mine Prop Treating Plant.

As a result of experiments in the preservative treatment of mine props carried on by the Forest Service, in cooperation with the Philadelphia and Reading Coal and Iron Company, of Pottsville, Pa., John M. Nelson, jr., who has had charge of the experiments, has submitted plans which the company has drawn up for an open tank treating plant, with a capacity of about 800 cubic feet per day. Work on the construction of the plant will be started at once. The experiments, though not yet completed, have demonstrated that preservative treatment is practicable and economical, and that the methods which have been employed are applicable to similar conditions in other parts of the country.

Tie Plates, Screw Spikes, etc.

The experimental work which the Forest Service has been carrying on in cooperation with the Northern Pacific Railway Company has resulted in the laying of a test track near Maywood, Wash. In this track the value of preservative treatment, tie plates, screw spikes, dowels, etc., will be practically demonstrated. H. B. Eastman, who has been in charge of the work, has now come to Washington for the writing of the report. In the spring he will return to the northwest and supervise the laying of a somewhat similar track in Montana.

Tie and Telephone Treatments.

H. A. Paul, who, for several months, has been engaged in seasoning and treating arborvitæ poles and hemlock and tamarack ties at Escanaba, Mich., is now in Washington for the preparation of his reports. As soon as the weather permits, in the

spring, the ties will be laid in a test track and the poles will be placed in an experimental line, in order that the results of the treatments may be definitely determined.

During January members of this Office delivered addresses, as follows:

January 15.—Progress in Wood Preservation in 1906, Mr. C. G. Crawford, at meeting of Wood Preservers' Association, Memphis, Tenn.

January 16.—Statistics of Tight Cooperage Stock, Mr. H. M. Hale, at meeting of Tight Barrel Stave Manufacturers' Association, Memphis, Tenn.

January 22.—Opportunities in Pine Wood Distillation, Dr. W. C. Geer, at meeting of Yellow Pine Manufacturers' Association, New Orleans, La.

OFFICE OF PUBLICATION AND EDUCATION.

Addresses on forest subjects were delivered in January, as follows:

Wyoming Wool Growers' Association, Rock Springs, Wyo., January 15 and 16, Gifford Pinchot.

National Wool Growers' Association, Salt Lake City, Utah, January 17 to 19, Gifford Pinchot.

Current Topics Club, Central Y. M. C. A., Elmira, N. Y., January 21, E. A. Sterling.

American National Live Stock Association, Denver, Colo., January 22 and 23, Gifford Pinchot.

University Settlement Society, New York, N. Y., January 23, Louis Margolin.

Cincinnati Lumbermen's Club, Cincinnati, Ohio, January 26, Gifford Pinchot.

Connecticut Forestry Association, New Haven, Conn., January 29, E. A. Sterling.

OFFICE OF RECORD.

Accounts.

Under the Fiscal Regulations expenses for meals and lodging should be submitted in monthly accounts (Form 4) supported by the proper receipts. (See Regulation 19 of the Fiscal Regulations.)

In exceptional cases when an emergency arises, such as lack of private funds, a Form A voucher may be used and direct payment will be made from this office when this mode of settlement is acceptable to the auditor. In every case of this kind, however, a statement of facts should be prepared, and accompany voucher when transmitted for payment.

The law prohibits advances of Government funds, and it is therefore necessary that members be provided with sufficient private funds to meet the expenses of ordinary travel until they can be reimbursed.

Neither numbers nor dates of letters of authorization should be inserted on Form 4 or Form A vouchers. This space is provided for the use of the current letter of authorization of the Forester and will be filled in in this office.

The attention of supervisors and other forest officers occupying leased premises outside of Washington, D. C., is called to clause 5 of the lease, which reads: "The lessee may terminate this lease at any time by thirty days' notice in writing

to the lessor." Since the lease is made to the Forester, notice that the premises will be vacated should be sent by him. In order that due notice may be given in accordance with the terms of the lease, the Forester should be informed in ample time, either by wire or by letter, that the office will be vacated on a specified date.

Freight not transported by rail or express should be entered on subvouchers as follows:

To freighting supplies from _____ to _____, _____ miles, _____ pounds, at \$_____ per 100 pounds.

Signed, _____,
Title, _____.

In future, railroad and express receipts for the shipment of public property, when submitted as subvouchers to an account for reimbursement of expenses, must specify the initial and terminal points of shipment, the number of pounds, and rate per pound charged.

Wherever two members, each having an authorization, travel or work together, separate accounts for the expenses incurred by each should be submitted for settlement. When only one of the party has an authorization he may assume all the expenses and render an account in his name in accordance with existing regulations and instructions.

In distributing reserve expenses on Form 99, cost of transportation of seedlings should be charged to Protection.

Transportation requests must not be used for travel performed on personal business.

Great care should be exercised to sign the receipt of Form 4 and Form A vouchers on the line following the words "Not to be signed in duplicate." The mistake of signing the certificate of approval, which in the new form appears just below, has necessitated the return of a large number of accounts for correction.

Forest Supervisors in charge of more than one reserve, in using transportation requests, will please enter in the lower left-hand corner the name of the reserve to which the travel is chargeable.

Supplies.

All shipments of freight over railroads should be made on Government bills of lading, except between local points which do not involve land grant. The Southern Pacific Railway south of San Francisco is practically all land grant, as are the Northern Pacific and most of the roads in Minnesota, Wisconsin, Michigan, Iowa, Illinois, Alabama, and Florida, the St. Louis and San Francisco Railroad in Missouri

and Indian Territory, the Atchison, Topeka and Santa Fe in Kansas, and the Queen and Crescent in Louisiana and Mississippi.

Government bills of lading will be furnished upon application to the Special Fiscal Agent.

It has been decided that rods will not be used hereafter in card index file cases of the Forest Service. When the present stock of index cards is exhausted no more perforated cards will be issued. File cases purchased hereafter will be without rods.

Forest officers who have the standard file case for 4 by 6 inch cards should remove the rods from the drawers and send them by mail to the Forester, marking the package with name and address for identification. A corresponding number of small metal plates will be furnished which can be attached to the drawers to cover the rod holes.

Photographic Laboratory.

Directions for ordering films are pasted on the front board of each camera furnished by the Forest Service. Several types of camera are in use, and a different kind of film is used in each type. Confusion and delay will be avoided if users of cameras will follow the directions carefully in making requisition for films.

Hereafter films furnished by the Service will be accompanied by printed slips containing blanks for name of user, notebook numbers, and remarks. The slips are printed on gummed paper, and should be filled in and affixed to film rolls or packs before the rolls or packs are returned to the photographer.

Recommendation slips sent with prints should be returned to the photographer as soon after their receipt by the author as the selections can be made. In all cases both accepted and rejected prints must be returned.

Stenography and Typewriting.

Requisitions signed by Chiefs of Offices are required for all copying of manuscripts in the Section of Stenography and Typewriting, and for temporary details of stenographers to Offices. A separate requisition should accompany each report or other manuscript to be typewritten. Special attention will be paid to the instructions given in Service Order No. 121, in order to avoid unnecessary copying.

Mailing Lists.

The general and extra mailing lists have been consolidated, and the combined list is called the general mailing list. It is classified by States and by occupations. When request is made by members of the Service that names be added to the list, the occupation or chief interest in forestry should be given in every case.

OFFICE OF GRAZING.

The grazing arrangements for 1907 have been made for a great majority of the reserves. They will be made promptly for the remaining reserves as soon as the reports and recommendations of the forest officers are received.

Old Form 630, Certificate Supplemental to Grazing Application, has been incorporated in the new grazing application, Form 879, and is therefore no longer in use.

Form 631, Agreement Supplemental to Grazing Application, is not required in connection with every application made, but is necessary only when the applicant owns more stock than is to be allowed to graze in the reserve, and when the surplus stock is liable to enter the reserve unless prevented from doing so.

OFFICE OF RESERVE ORGANIZATION.

Lease of Offices.

The attention of forest officers in charge of reserves is called to the provision in the lease of office rooms providing that thirty days' notice must be given the owner before the rooms are vacated. The forest officer in charge should, therefore, inform the Forester when he wishes to vacate an office, and the owner will be notified.

Telegrams.

Field men are requested to be more careful in telegraphing. Telegrams should be clear and concise, and never sent unless there is urgent need of immediate action. In a Government message the address and signature are counted, and an additional charge is made for each word over twenty. Owing to the fact that Washington time is from two to three hours later than that of the reserve offices, many messages sent late in the day do not reach this office in time for action that day. Night messages accomplish the same purpose at half the cost, and should be used in all such cases when practicable. Regulation 16 of the Fiscal Regulations should be more closely observed.

Telephone Service.

Agreements have been recently entered into by the Service with telephone companies desiring to obtain poles from the reserves, whereby the Service is granted free use of the companies' lines for official business in return for permission to secure the poles desired.

New Administrative Units.

A proposed plan for the readjustment of reserve lines, in order to give more compact administrative units, has been sent out to all forest officers affected for their recommendations on the contemplated changes. The purpose of the plan is to divide many of the larger reserves into smaller areas and detail an administrative officer to each unit with a view to giving the public more prompt and satisfactory service.

Acting Forest Supervisors.

Hereafter all officers, not forest supervisors, in charge of reserves will be designated Acting Forest Supervisors.

Maps.

Requisitions for maps should be made only for a number sufficient for the needs of forest officers, and should not include maps for general distribution. The great number of new reserves recently created or altered has made it impossible to prepare maps to keep up with the actual needs of the Service.

Reserve Orders, etc.

The Inspectors have found that the present system of keeping Reserve Orders, Service Orders, and circular letters filed in a cabinet is very inconvenient for ready reference. A better way, and one which is used in the Washington office, is to keep them in a loose-sheet holder, one for Reserve Orders and one for Service Orders and circular letters. If Supervisors wish to adopt this method, sheet holders will, of course, be furnished upon requisition.

Requisitioning by Number.

A great many mistakes are made by supervisors in requisitioning articles and forms by number only, as provided in the instructions relating to requisitions. To avoid further mistakes of this kind all supervisors are requested hereafter to give a description of the forms or articles, besides the number. In ordering articles or forms by telegraph the number need not be given.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR MARCH, 1907.

The program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

LAW.

GEORGE W. WOODRUFF, in Charge.

Claims, A. C. SHAW.

Trespass, P. P. WELLS.

Privileges, M. J. McVEAN.

GENERAL INSPECTION.

FREDERICK E. OLMSTED, Assistant Forester, in Charge, Washington, D. C.

E. T. ALLEN, *Forest Inspector*, Tacoma, Wash.

COERT DU BOIS, *Forest Inspector*, Silver City, N. Mex.

SMITH RILEY, *Forest Inspector*, Saratoga, Wyo.

F. W. REED, *Forest Inspector*, Elko, Nev.

J. H. HATTON, *Forest Inspector*, Albuquerque, N. Mex.

D. D. BRONSON, *Forest Inspector*, Washington, D. C.

M. L. ERICKSON, *Assistant Forest Inspector*, Lakeview, Oreg.

F. A. SILCOX, *Assistant Forest Inspector*, Washington, D. C.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman*, in the Office of the Forester.

FOREST MANAGEMENT.

WILLIAM T. COX, Assistant Forester in Charge.

Timber Sales, E. E. CARTER, *Forest Inspector*.

Silvics, R. ZON, *Forest Assistant*.

Cooperation, A. W. COOPER, *Forest Inspector*.

Inspection.	{	C. S. CHAPMAN, <i>Forest Inspector</i> , Boise, Idaho.
		P. G. REDINGTON, <i>Forest Inspector</i> , Washington, D. C.
		K. W. WOODWARD, <i>Assistant Forest Inspector</i> , Kalispell, Mont.
		W. G. WEIGLE, <i>Assistant Forest Inspector</i> , Helena, Mont.
		G. M. HOMANS, <i>Assistant Forest Inspector</i> , Custom-House, Portland, Oreg.
		W. E. LA FOUNTAIN, <i>Assistant Lumberman</i> , Saratoga, Wyo.
		E. M. HAMILTON, <i>Assistant Lumberman</i> , Deadwood, S. Dak.
		A. J. NORTON, <i>Assistant Lumberman</i> , Santa Fe, N. Mex.
		G. P. GREGG, <i>Assistant Lumberman</i> , Saratoga, Wyo.

PROJECTS.

EXAMINATION OF TIMBER SALES.

Arizona—

San Francisco Mountains Forest Reserve—A. B. RECKNAGEL, Flagstaff.

California—

Stanislaus Forest Reserve—W. G. DURBIN, Sonora.

Shasta Forest Reserve—P. T. HARRIS and C. A. GALARNEAU, Sisson.

Sierra Forest Reserve (South)—I. F. ELDREDGE and R. S. POND, Hot Springs.

Idaho—

Sawtooth and Payette forest reserves—S. L. MOORE, Boise.

Weiser Forest Reserve—L. L. WHITE, Weiser.

Montana—

Helena Forest Reserve—J. E. KEACH, Helena.

New Mexico—

Gila Forest Reserve—D. RODMAN, Silver City.

South Dakota—

Black Hills Forest Reserve—H. C. NEEL, Deadwood.

Wyoming—

Yellowstone Forest Reserve (Shoshone Division)—R. Y. STUART, Wapiti.

COOPERATIVE.

Arkansas—

Working plan for the Stout-Greer Lumber Company, in cooperation with the owners—S. J. RECORD, Hampton; assistants, H. B. OAKLEAF, G. E. SAWYER, G. P. BARD, and J. S. BENEDICT.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Hampshire—

Examination of woodlots and timber tracts—BENTON MACKAYE, Nashua.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Odanah.

Northeastern States—

Examination of woodlots and timber tracts—WESLEY BRADFELD, Washington, D. C.

DENDROLOGY.

GEO. B. SUDWORTH, Assistant Forester, in Charge.

PROJECTS.

California—

Study of tanbark trees of Pacific coast—Prof. W. L. JEPSON; permanent address, Berkeley.

Special studies of little-known California trees—four-leaf pine, Torrey pine, Bishop pine—Prof. W. R. DUDLEY, Leland Stanford University.

Florida—

Study of improved method of turpentineing, in cooperation with the Hillman-Sutherland Land Company—FRANK KLARPP, Green Cove Springs.

North Carolina—

Study of characteristics of turpentines derived from American pines, in cooperation with the Department of Chemistry, University of North Carolina—WILLIAM S. DICKSON (directed by Dr. CHAS. H. HERTY, Professor of Chemistry), Chapel Hill.

Texas—

Study of desert junipers—Prof. W. L. BRAY; permanent address, Austin.

FOREST EXTENSION.

SAMUEL N. SPRING, Assistant Forest Inspector, Acting in Charge.

Inspection, {G. W. PEAVY, *in Charge*, Pasadena, Cal.
G. B. LULL, Sacramento, Cal.

Cooperative Planting, S. B. DETWILER, Acting in Charge.

Reserve Planting, L. C. MILLER.

PROJECTS.

California—

Establishment of rangers' nurseries, San Gabriel and San Bernardino Forest Reserves—J. D. GUTHRIE, care R. H. CHARLETON, Los Angeles.

Nursery and planting work, Santa Barbara Forest Reserve—G. W. PEAVY, Pasadena; assistants, B. R. H. D'ALLEMAND and H. C. MUZZALL, Santa Barbara.

Nursery and planting work, San Gabriel Forest Reserve—G. W. PEAVY, Pasadena; assistants, E. C. CLIFFORD and S. Y. PARNAY.

Hawaii—

Cooperative experimental planting—R. S. HOSMER, Honolulu.

Nebraska—

Nursery and planting work, Dismal River Forest Reserve—C. A. SCOTT, Forest Supervisor; assistant, W. H. MAST, Halsey.

New Mexico—

Nursery and planting work on the Gila Forest Reserve and the Fort Bayard Military Reservation—W. R. MATTOON; assistant, W. B. HADLEY, Fort Bayard.

General Studies—

Preparation of reports and compilation of data on planting stations—J. M. FETHEROLF, Washington, D. C.

Preparation of report on forest planting in California—S. J. FLINTHAM, Washington, D. C.

Germination tests of forest tree seeds—W. H. VON BAYER, Washington, D. C.

FOREST PRODUCTS.

WM. L. HALL, Assistant Forester, in Charge.

Forest Measurements, JOHN FOLEY.

Wood Preservation, CARL G. CRAWFORD.

Wood Chemistry, A. L. DEAN.

Wood Utilization, R. S. KELLOGG.

Reserve Engineering, W. E. HERRING.

PROJECTS.

California—

Tests of the strength of eucalyptus wood, in cooperation with the State and the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistant, O. T. SWAN.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, FREDERICK DUNLAP and CORNELIUS BARRY.

Experiments in wood preservatives—A. L. DEAN, Sheffield Scientific School, Yale University, New Haven; assistants, ERNEST BATEMAN and D. C. PARMELEE.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, H. S. BETTS and J. A. NEWLIN.

Massachusetts—

Studies of the value of the various woods for pulp—A. D. LITTLE, 93 Broad street, Boston, and H. S. BRISTOL, 696 East First street, South Boston.

Montana—

The laying of an experimental track with western tamarack and Douglas fir to test the value of seasoning and treating, and various devices for reducing the mechanical wear of the rails; in cooperation with the Northern Pacific Railway Company—W. H. KEMPFER, Hotel Casey, Sandpoint, Idaho (March 1-15); McGowan Hotel, Plains, Mont. (March 16-31).

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene; assistant, A. E. OMAN.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Virginia—

Experiments in treating loblolly pine cross arms, in cooperation with the American Telephone and Telegraph Company—W. F. SHERFESSEE, Norfolk (after March 15); assistant, M. C. JENSEN.

Washington—

Tests of western hemlock and forest-reserve timbers, in cooperation with the University of Washington—ROLF THELEN, University Station, Seattle; assistant, H. S. SACKETT.

General Studies—

Collection of statistics of forest products for the year 1906, in cooperation with the Bureau of the Census—H. M. HALE, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of lumber prices—A. H. PIERSON, Washington, D. C.
 Study of commercial processes of wood distillation—W. C. GEER, New Haven, Conn.
 Study of woods used in the vehicle industry—H. B. HOLROYD, Washington, D. C.
 Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.
 Study of creosote production—C. L. HILL, Washington, D. C.
 Study of methods of testing timber—M. CLINE, Washington, D. C.

PUBLICATION AND EDUCATION.

HERBERT A. SMITH, Editor, in Charge.

Review, FINDLEY BURNS.

Information, TREADWELL CLEVELAND, Jr.

Education, HERBERT A. SMITH.

Printing, QUINCY R. CRAFT.

PUBLICATIONS IN FEBRUARY.

Circular 22 (Fifth Revision).—Practical Assistance to Tree Planters.

Circular 78.—Woods Used for Packing Boxes in New England.

Forest Planting Leaflets (reprinted as circulars):

- | | |
|-----------------------|--------------------------|
| 62. Shagbark Hickory. | 72. Western Yellow Pine. |
| 63. Basswood. | 73. Red Cedar. |
| 67. White Pine. | 75. Hackberry. |

Press Bulletin 148.—A New Source for Fence Posts.

Press Bulletin 149.—Free Timber from the Forest Reserves.

RECORD.

JAMES B. ADAMS, Special Fiscal Agent, in Charge.

Maintenance, GEO. G. ANDERSON.

Accounts, GEO. E. KING.

Purchase, HARRY C. TOWERS.

GRAZING.

A. F. POTTER, Inspector of Grazing, in Charge.

Inspection, { C. H. ADAMS, Washington, D. C.
 { W. C. CLOS, Washington, D. C.

RESERVE ORGANIZATION.

R. E. BENEDICT, Forest Inspector, in Charge.

FOREST RESERVES.

NORTHERN DISTRICT.

GEO. H. CECIL, Forest Assistant, in Charge.

IDAHO.

Bear River Forest Reserve—J. F. SQUIRES, Forest Supervisor, Logan, Utah.
 Bitter Root Forest Reserve—CASSIUS M. DAY, Forest Supervisor, Kooskia.
 Caribou Forest Reserve—J. T. WEDEMEYER, Acting Forest Supervisor, Soda Springs.
 Cassia Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.
 Coeur d'Alene Forest Reserve—RICHARD H. RUTLEDGE, Acting Forest Supervisor, Wallace.

Henrys Lake Forest Reserve—HOMER E. FENN, Forest Supervisor, St. Anthony; J. F. BRUINS, Forest Assistant, St. Anthony.

Lemhi Forest Reserve—GUY B. MAINS, Forest Supervisor, Mackay.

Payette Forest Reserve—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant, Boise.

Pocatello Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.

Priest River Forest Reserve—B. F. McCONNELL, Forest Supervisor, Priest River; R. L. FROMME, Forest Assistant, Priest River.

Raft River Forest Reserve—P. T. WRENSTED, Forest Supervisor, Pocatello.

Salmon River Forest Reserve—GEO. G. BENTZ, Acting Forest Supervisor, Salmon City.

Sawtooth Forest Reserve—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant, Boise.

Weiser Forest Reserve—JOHN B. LAFFERTY, Forest Supervisor, Weiser.

MINNESOTA.

Minnesota Forest Reserve—G. E. MARSHALL, Acting Forest Supervisor, Cass Lake.

MONTANA.

Big Belt Forest Reserve—ROBERT J. MOORE, Acting Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant, Helena.

Big Hole Forest Reserve (Northern Division)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda.

Big Hole Forest Reserve (Southern Division)—J. B. SEELEY, Forest Supervisor, Sheridan.

Bitter Root Forest Reserve (Montana Division)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Anaconda.

Crazy Mountains Forest Reserve—E. C. RUSSELL, Forest Supervisor, Livingston.

Ekalaka Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.

Elkhorn Forest Reserve—ROBERT J. MOORE, Acting Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant, Helena.

Gallatin Forest Reserve—DAVID CONKLING, Forest Supervisor, Bozeman; DORR SKEELS, Forest Assistant, Bozeman.

Helena Forest Reserve—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant, Helena.

Hell Gate Forest Reserve (east of Bitter Root Slope)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; W. W. WHITE, Forest Assistant, Anaconda.

Hell Gate Forest Reserve (Bitter Root Slope)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Anaconda.

Highwood Mountains Forest Reserve—JAMES G. THAIN, Forest Supervisor, Highwood.

Kootenai Forest Reserve—F. N. HAINES, Forest Supervisor, Libby.

Lewis and Clark Forest Reserve (Northern Division)—W. H. DAUGS, Acting Forest Supervisor, Kalispell; D. G. KINNEY, Forest Assistant, Kalispell.

Lewis and Clark Forest Reserve (Southern Division)—PAGE S. BUNKER, Forest Supervisor, Kalispell; D. G. KINNEY, Forest Assistant, Kalispell.

Little Belt Forest Reserve—IRA E. TODD, Forest Supervisor, Neihart.

Lolo Forest Reserve—ELERS KOCH, Forest Supervisor, Missoula.

Long Pine Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.

Madison Forest Reserve—J. B. SEELY, Forest Supervisor, Sheridan.

Missoula Forest Reserve—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Pryor Mountains Forest Reserve—W. H. PEARCE, Forest Supervisor, Wapiti.
 Snowy Mountains Forest Reserve—IRA E. TODD, Forest Supervisor, Neihart.
 Yellowstone Forest Reserve (Absaroka Division)—E. C. RUSSELL, Forest Supervisor, Livingston; BERT P. KIRKLAND, Forest Assistant.

SOUTH DAKOTA.

Black Hills Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood; R. P. IMES, Assistant Forest Inspector, Deadwood.
 Cave Hills Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.
 Short Pine Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.
 Slim Buttes Forest Reserve—J. F. SMITH, Forest Supervisor, Deadwood.

WYOMING.

Big Horn Forest Reserve—W. E. JACKSON, Forest Supervisor, Bighorn.
 Medicine Bow Forest Reserve (Wyoming)—L. G. DAVIS, Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga.
 Sierra Madre Forest Reserve—L. G. DAVIS, Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga.
 Yellowstone Forest Reserve (Wind River Division)—ZEPH JONES, Forest Supervisor, Pinedale.
 Yellowstone Forest Reserve (Teton Division)—ROBERT E. MILLER, Forest Supervisor, Jackson.
 Yellowstone Forest Reserve (Shoshone Division)—W. H. PEARCE, Forest Supervisor, Wapiti.

SOUTHERN DISTRICT.

F. C. W. POOLER, Forest Supervisor, in Charge.

ARIZONA.

Baboquivari Forest Reserve—R. J. SELKIRK, Acting Forest Supervisor, Tucson.
 Black Mesa Forest Reserve—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.
 Chiricahua Forest Reserve—C. T. MCGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant, Paradise.
 Grand Canyon Forest Reserve (Northern Division)—SELDEN F. HARRIS, Forest Supervisor, Fredonia; LORUM PRATT, Deputy Forest Supervisor.
 Grand Canyon Forest Reserve (Southern Division)—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.
 Huachuca Forest Reserve—R. A. RODGERS, Acting Forest Supervisor.
 Mount Graham Forest Reserve—H. A. E. MARSHALL, Forest Supervisor, Safford.
 Pinal Mountains Forest Reserve—H. A. E. MARSHALL, Forest Supervisor, Safford.
 Prescott Forest Reserve—C. H. HINDERER, Acting Forest Supervisor, Prescott.
 San Francisco Mountains Forest Reserve—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.
 Santa Rita Forest Reserve—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.
 Santa Catalina Forest Reserve—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.
 Tonto Forest Reserve—W. H. REED, Forest Supervisor, Roosevelt.
 Tumacacori Forest Reserve—R. A. ROGERS, Acting Forest Supervisor, Nogales.

COLORADO.

Battlement Mesa Forest Reserve—DAVID ANDERSON, Acting Forest Supervisor, Collbran.

Cochetopa Forest Reserve—R. W. SHELLABARGER, Forest Supervisor, Moffat.

Fruita Forest Reserve—H. K. PORTER, Forest Supervisor, Delta.

Gunnison Forest Reserve—WM. R. KREUTZER, Forest Supervisor, Gunnison.

Holy Cross Forest Reserve—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; F. H. MORRILL, Forest Assistant, Glenwood Springs.

Leadville Forest Reserve—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant, Leadville.

Medicine Bow Forest Reserve (Colorado Division)—SHEP N. HUSTED, Forest Supervisor, Fort Collins.

Montezuma Forest Reserve—H. N. WHEELER, Forest Supervisor, Durango.

Park Range Forest Reserve—THOMAS HOGAN, Forest Supervisor, Kremmling.

Pikes Peak Forest Reserve—MARK G. WOODRUFF, Forest Supervisor, Denver; T. D. WOODBURY, Forest Assistant, Denver.

San Isabel Forest Reserve—EUGENE WILLIAMS, Forest Supervisor, Westcliffe.

San Juan Forest Reserve—F. C. SPENCER, Forest Supervisor, Monte Vista.

Uncompahgre Forest Reserve—H. K. PORTER, Forest Supervisor, Delta.

Wet Mountains Forest Reserve—EUGENE WILLIAMS, Forest Supervisor, Westcliffe.

White River Forest Reserve—JAMES A. BLAIR, Forest Supervisor, Meeker.

NEBRASKA.

Niobrara Forest Reserve—C. A. SCOTT, Forest Supervisor; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey.

Dismal River Forest Reserve—C. A. SCOTT, Forest Supervisor; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey.

North Platte Forest Reserve—C. A. SCOTT, Forest Supervisor, Halsey.

NEW MEXICO.

Big Burro Forest Reserve—R. C. McCLURE, Silver City.

Gallinas Forest Reserve—JOHN KERR, Forest Supervisor, Capitan.

Gila Forest Reserve—R. C. McCLURE, Forest Supervisor, Silver City; A. O. WAHA, Forest Assistant, Silver City; M. SMITH, Forest Assistant, Silver City.

Jemez Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Lincoln Forest Reserve—JOHN KERR, Forest Supervisor, Capitan.

Pecos River Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Portales Forest Reserve—ROSS McMILLAN, Forest Supervisor, Portales.

Taos Forest Reserve—L. F. KNEIPP, Forest Supervisor, Santa Fe.

OKLAHOMA.

Wichita Forest Reserve—E. F. MORRISSEY, Forest Supervisor, Cache.

UTAH.

Aquarius Forest Reserve—GEO. H. BARNEY, Forest Supervisor, Escalante.

Beaver Forest Reserve—WILLIAM HURST, Forest Supervisor, Beaver.

Dixie Forest Reserve—CHAS. G. Y. HIGGINS, Forest Supervisor, St. George.

Fillmore Forest Reserve—WILLIAM HURST, Forest Supervisor, Beaver.

Fish Lake Forest Reserve—N. E. SNELL, Acting Forest Supervisor, Salina.

Glenwood Forest Reserve—N. E. SNELL, Acting Forest Supervisor, Salina.

Grantsville Forest Reserve—C. F. COOLEY, Forest Supervisor, Grantsville.

La Sal Forest Reserve—ORRIN C. SNOW, Forest Supervisor, Moab.

Manti Forest Reserve—A. W. JENSEN, Forest Supervisor, Ephraim.
 Monticello Forest Reserve—ORRIN C. SNOW, Forest Supervisor, Moab.
 Payson Forest Reserve—DAN S. PACK, Forest Supervisor, Payson.
 Salt Lake Forest Reserve—E. H. CLARKE, Forest Supervisor, Murray.
 Sevier Forest Reserve—TIMOTHY C. HOYT, Forest Supervisor, Parowan.
 Uinta Forest Reserve—WILLARD I. PACK, Forest Supervisor, Provo; W. JONES BOWEN, Deputy Forest Supervisor, Spanish Forks; H. F. STUDLEY, Forest Assistant, Provo.
 Vernon Forest Reserve—C. F. COOLEY, Forest Supervisor, Grantsville.
 Wasatch Forest Reserve—E. H. CLARKE, Forest Supervisor, Murray.

WESTERN DISTRICT.

A. R. POWERS, Forest Assistant, in Charge.

ALASKA.

Alexander Archipelago and Afognak forest reserves—W. A. LANGILLE, Forest Supervisor, Ketchikan.

CALIFORNIA.

Diamond Mountain Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy.
 Klamath Forest Reserve—R. L. P. BIGELOW, Forest Supervisor, Yreka; C. J. BUCK, Forest Assistant, Yreka.
 Lassen Peak Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor, Quincy.
 Modoc Forest Reserve—A. H. HOGUE, Forest Supervisor, Alturas.
 Monterey Forest Reserve—N. O. TORSTENSON, Acting Forest Supervisor, Salinas.
 Pinnacles Forest Reserve—N. O. TORSTENSON, Acting Forest Supervisor, Salinas.
 Plumas Forest Reserve—L. A. BARRETT, Forest Supervisor, Quincy.
 San Bernardino Forest Reserve—R. H. CHARLTON, Forest Supervisor, Los Angeles.
 San Gabriel Forest Reserve—R. H. CHARLTON, Forest Supervisor, Los Angeles; B. H. CROW, Forest Ranger, Pasadena.
 San Jacinto Forest Reserve—J. R. BELL, Forest Supervisor, Hemet.
 San Luis Obispo Forest Reserve—E. S. MAINWARING, Forest Supervisor, San Luis Obispo.
 Santa Barbara Forest Reserve—W. M. SLOSSON, Forest Supervisor, Santa Barbara; J. REBMANN, Forest Assistant, Santa Barbara.
 Shasta Forest Reserve—G. A. COLEMAN, Forest Supervisor, Sisson; R. C. HACKLEY, Forest Assistant, Sisson.
 Sierra Forest Reserve (Northern Division)—C. H. SHINN, Forest Supervisor, Northfork; H. J. THOMPSON, Forest Assistant, Northfork.
 Sierra Forest Reserve (Southern Division)—W. B. GREELEY, Forest Supervisor, Hot Springs, Tulare County.
 Stanislaus Forest Reserve—S. L. N. ELLIS, Forest Supervisor, Sonora.
 Stony Creek Forest Reserve—MADISON B. ELLIOTT, Forest Supervisor, Willows.
 Tahoe Forest Reserve—JNO. C. WELLS, Acting Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant, Nevada City.
 Trabuco Canyon Forest Reserve—J. R. BELL, Forest Supervisor, Hemet.
 Trinity Forest Reserve—F. H. HAFLEY, Forest Supervisor, Weaverville.
 Warner Mountains Forest Reserve—A. H. HOGUE, Forest Supervisor, Alturas.

NEVADA.

Charleston Forest Reserve—DAVID BARNETT, Acting Forest Supervisor, Las Vegas; D. S. MARSHALL, Deputy Forest Supervisor, Las Vegas.

OREGON.

Ashland Forest Reserve—S. C. BARTRUM, Forest Supervisor, Roseburg; R. H. HAMMATT, Forest Assistant, Roseburg.

Blue Mountains Forest Reserve (Western Division)—A. S. IRELAND, Forest Supervisor, Prineville.

Blue Mountains Forest Reserve (Eastern Division)—HENRY IRELAND, Forest Supervisor; S. S. TERRELL, C. R. SEITZ, Deputy Forest Supervisors, Sumpter.

Bull Run Forest Reserve—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.

Cascade Forest Reserve (Northern Division)—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.

Cascade Forest Reserve (Southern Division)—S. C. BARTRUM, Forest Supervisor, Roseburg.

Chesniminus Forest Reserve—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Freemont Forest Reserve—M. L. ERICKSON, Acting Supervisor, Lakeview.

Goose Lake Forest Reserve—M. L. ERICKSON, Acting Forest Supervisor, Lakeview.

Heppner Forest Reserve—D. B. SELLER, Acting Forest Supervisor, Heppner.

Maury Mountains Forest Reserve—A. S. IRELAND, Forest Supervisor, Prineville.

Siskiyou Forest Reserve—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.

Wallowa Forest Reserve—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Wenaha Forest Reserve—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash.

WASHINGTON.

Mount Rainier Forest Reserve—G. F. ALLEN, Forest Supervisor, Orting; C. H. FLORY, Forest Assistant, Orting.

Olympic Forest Reserve—FRED HANSON, Forest Supervisor, Hoodspport.

Wenaha Forest Reserve—J. M. SCHMITZ, Forest Supervisor, Walla Walla.

Washington Forest Reserve (Western Division)—G. B. COLEMAN, Forest Supervisor, Sumas.

Washington Forest Reserve (Eastern Division)—G. W. MILHAM, Forest Supervisor, Chelan.

Reserve Boundaries, CLYDE LEAVITT.

Compilation, R. V. R. REYNOLDS.

PROJECTS.

Examination of proposed reserves and additions to and eliminations from existing reserves, and examinations of agricultural land in Forest Reserves under act of June 11, 1906—W. H. B. KENT, in Charge, Hotel Sheldon, El Paso, Texas:

Arizona—

STANTON G. SMITH, Prescott; JOHN W. FARMER, Clifton; H. O. STABLER, Phoenix.

California—

R. W. AYRES, South Pasadena; C. J. BUCK, Yreka.

Colorado—

W. J. MORRILL, Glenwood Springs; W. C. HODGE, Fort Collins; E. W. SHAW, Durango; F. D. WHITNEY, 814 E. San Miguel st., Colorado Springs.

Florida—

C. D. MELL, Washington, D. C.

Hawaii—

R. S. HOSMER, Honolulu.

Idaho—

JOHN H. CLARK, Boise.

New Mexico—

J. H. KINNEY and C. J. STAHL, Capitan.

Oregon—

L. VON WERNSTED, Canyon City; A. C. RINGLAND, Custom House, Portland.

South Dakota—

PAUL D. KELLETER and C. W. FITZGERALD, Deadwood.

Washington—

H. F. STUDLEY, Hotel Tacoma, Tacoma; LEE A. HARRIS, Chelan; JOHN H. CLARK, Walla Walla.

Surveys of boundaries of existing reserves:

California—

F. E. JOY, Sisson.

SERVICE CHANGES IN FEBRUARY.

APPOINTED.

Law—

G. S. ARNOLD, Expert.

CHAS. PIERCE.

Forest Management—

GEORGE BARD, Forest Student.

R. J. ST. J. BENEDICT, Forest Student.

GEO. P. GREGG, Assistant Lumberman.

Forest Products—

R. E. L. BIRGEFELDT, Draftsman.

Miss E. L. MIDDLEKOFF, Clerk.

Record—

Miss MABEL ARNOLD, Clerk.

Miss MABEL BARTON, Clerk.

Miss ELSA BERNHARDT, Clerk.

Miss HELEN F. CARPENTER, Clerk.

Mrs. ELSIE R. COALE, Clerk.

M. J. S. DOWNEY, Messenger.

GEO. W. GOSHEN, Messenger (by reinstatement).

Miss MABEL E. KNIGHT, Clerk.

Miss E. M. A. LINNELL, Clerk.

Miss MARY O'TOOLE, Clerk.

Miss HATTIE R. PATTERSON, Clerk.

Mrs. R. C. PENNEBAKER, Clerk.

Mrs. L. G. RIDDELL, Clerk.

JOHN A. SPELLBRING, Messenger.

Miss JANET I. WALTON, Clerk.

Mrs. A. A. WHITING, Charwoman.

Miss G. M. ZINSSMEISTER, Clerk.

Miss MARY L. STILLWELL, Clerk.

Miss ANNIE E. DOW, Clerk.

Miss PRESTON WOMASK, Clerk.

Reserve Organization—

GUY B. MAINS, Forest Supervisor, Lemhi Forest Reserve, Idaho.

CLYDE R. SEITZ, Deputy Forest Supervisor, Blue Mountains Forest Reserve (East), Oregon.

WILLIAM M. MAULE, Forest Assistant.

CHRISTOPHER FITZGERALD, Surveyor.

WALTER A. FAY, Forest Ranger, Chesnimnus Forest Reserve, Oregon.

ROY HEADLEY, Deputy Forest Ranger, Coeur d'Alene Forest Reserve, Idaho.

W. A. MERRILL, Deputy Forest Ranger, Stony Creek Forest Reserve, California.

D. F. JOHNSON, Clerk, Blue Mountains (East) Forest Reserve, Oregon.

FRANCISCO DELGADO, Clerk, Jemez Forest Reserve, New Mexico.

FRANK HAYNIE, Clerk, Tahoe Forest Reserve, California.

The following were appointed Assistant Forest Rangers:

FOSTER G. SMITH, Hell Gate Forest Reserve, Montana.

C. SYDNEY TREMEWAN, Ruby Mountains Forest Reserve, Nevada.

LEWIS SHARP, Ruby Mountains Forest Reserve, Nevada.

HARVEY W. HARRIS, Chesnimnus Forest Reserve, Oregon.

ROSCOE HAINES, Lewis and Clark Forest Reserve (North), Montana.

L. S. MEYERS, Taos Forest Reserve, New Mexico.

A. M. NEAL, Wichita Forest Reserve, Oklahoma.

LEE E. COOPER, Pikes Peak Forest Reserve, Colorado.

E. F. KNOWLTON, Grantsville Forest Reserve, Utah.

RAYMOND B. ROGERS, Lincoln Forest Reserve, New Mexico.

CHARLES F. PATTERSON, Yellowstone Forest Reserve (Wind River Division), Wyoming.

PENN L. GOOLDY, Sierra Madre Forest Reserve, Wyoming.

LEWIS N. LORENZEN, Shasta Forest Reserve, California.

The following were appointed Forest Guards:

JOHN M. DORMAN, Jemez Forest Reserve, New Mexico.

E. S. DEVINE, Ekalaka Forest Reserve, Montana.

WILLIAM T. MORRIS, Jr., Sevier Forest Reserve, Utah.

E. R. CLARK, Ekalaka Forest Reserve, Montana.

CHAS. R. CHILDS, Santa Rita Forest Reserve, Arizona.

PAUL FOSTER, Lincoln Forest Reserve, New Mexico.

THOMAS C. GRACE, Black Hills Forest Reserve, South Dakota.

B. M. THOMAS, Jemez Forest Reserve, New Mexico.

JOHN N. ANDERSON, Grand Canyon Forest Reserve (South), Arizona.

LOUIS T. HILDEBRAND, San Luis Obispo Forest Reserve, California.

R. M. DEBITT, Coeur d'Alene Forest Reserve, Idaho.

JOHN J. MCNAMEE, Black Hills Forest Reserve, South Dakota.

ILVER S. SELLERS, San Luis Obispo Forest Reserve, California.

DARIC MARTINEZ, San Luis Obispo Forest Reserve, California.

GROVER A. ALLEN, Coeur d'Alene Forest Reserve, Idaho.

PROMOTED.

Forest Products—

ROYAL S. KELLOGG, Forest Inspector.

Miss E. B. LEECH, Clerk.

Record—

Miss BLANCHE A. JUDSON, Clerk.

Reserve Organization—

JOHN D. JONES, Forest Ranger, Lolo Forest Reserve, Montana.

CHAS. C. HALL, Acting Forest Supervisor, Bighole (North) and Hell Gate forest reserves, Montana.

DAVID BARNETT, Acting Forest Supervisor, Charleston Forest Reserve, Nevada.

CLARENCE N. WOODS, Forest Ranger, Ruby Mountains and Independence forest reserves, Nevada.

M. F. GIFFIN, Forest Ranger, Wallowa Forest Reserve, Oregon.

GEORGE H. BIRDNO, Assistant Forest Ranger, Mount Graham Forest Reserve, Arizona.

ISAIAH W. FOSTER, Forest Ranger, Holy Cross Forest Reserve, Colorado.

RESTORED FROM FURLOUGH.

Reserve Organization—

J. L. AMMON, Deputy Forest Ranger, Klamath Forest Reserve, California.

WILLIAM D. FUNK, Deputy Forest Ranger, Sevier Forest Reserve, Utah.

ALBERT ELLIS REDSTONE, Assistant Forest Ranger, Sierra Forest Reserve (North), California.

TRANSFERRED.

Reserve Organization—

CARL J. STAHL, Forest Ranger, from Cochetopa Forest Reserve, Colorado, to Reserve Boundaries.

H. F. STUDLEY, Forest Assistant, from Uinta Forest Reserve, Utah, to Reserve Boundaries.

GEORGE G. BENTZ, Forest Ranger, from Bitter Root Forest Reserve, Idaho, to Salmon River Forest Reserve, Idaho.

FRED D. WHITNEY, Forest Ranger, from Pikes Peak Forest Reserve, Colorado, to Reserve Boundaries.

HARRY W. PORTER, Clerk, from Washington office to office of Cascade Forest Reserve (North), Oregon.

F. J. STEELE, Forest Ranger, from Henrys Lake Forest Reserve, Idaho, to Caribou Forest Reserve, Idaho.

JAMES BLACKHALL, Forest Ranger, from Medicine Bow Forest Reserve (Wyoming Division), to Sierra Madre Forest Reserve, Wyoming.

MILTON J. ANDERSON, Forest Ranger, from Cascade Forest Reserve (North), Oregon, to Siskiyou Forest Reserve, Oregon.

JOHN REID, Deputy Forest Ranger, from Medicine Bow Forest Reserve (Wyoming Division), Wyoming, to Crow Creek Forest Reserve, Wyoming.

J. V. SEAMAN, Deputy Forest Ranger, from White River Forest Reserve, Colorado, to San Gabriel Forest Reserve, California.

ALBERT B. CLAFLIN, Deputy Forest Ranger, from Lewis and Clark Forest Reserve (North), Montana, to Kootenai Forest Reserve, Montana.

LUCAS W. HASTINGS, Assistant Forest Ranger, from Yellowstone Forest Reserve (Teton Division), Wyoming, to Henrys Lake Forest Reserve, Idaho.

ROWLAND W. BROWN, Assistant Forest Ranger, from Yellowstone Forest Reserve (Teton Division), Wyoming, to Henrys Lake Forest Reserve, Idaho.

WILLIAM SWAN, Assistant Forest Ranger, from Bitter Root Forest Reserve, Montana, to Salmon River Forest Reserve, Idaho.

CLARENCE N. WOODS, Forest Ranger, from Yellowstone Forest Reserve, Wyoming, to Independence and Ruby Mountains Forest Reserve, Oregon.

W. W. COX, Assistant Forest Ranger, from Bitter Root Forest Reserve, Montana, to Hell Gate Forest Reserve, Montana.

FURLOUGHED.

Reserve Organization—

WALTER E. HANKS, Assistant Forest Ranger, Aquarius Forest Reserve, Utah.

JOSEPH J. PORTER, Assistant Forest Ranger, Aquarius Forest Reserve, Utah.

E. J. FINCH, Assistant Forest Ranger, Olympic Forest Reserve, Washington.
 WILLIAM H. HOTTELLING, Assistant Forest Ranger, Klamath Forest Reserve, California.
 WALLACE M. RIDDLE, Assistant Forest Ranger, Sevier Forest Reserve, Utah.
 GEORGE SIEBENTRITT, Assistant Forest Ranger, Gallatin Forest Reserve, Montana.

. **RESIGNED.**

Record—

MISS EDITH F. GORDON, Clerk.
 MISS JESSIE M. LANE, Clerk.
 MISS LENA BRYAN, Clerk.
 JACKSON BONDS, Laborer.

Reserve Organization—

C. Y. WEBB, Deputy Forest Ranger, Mount Graham Forest Reserve, Arizona.
 BYRON E. SMITH, Assistant Forest Ranger, Sierra Forest Reserve (South), California.
 JAMES E. BERGMAN, Forest Guard, Lincoln Forest Reserve, New Mexico.
 GEORGE E. HOYT, Assistant Forest Ranger, Hell Gate Forest Reserve, Montana.
 ALBERT J. HAAS, Assistant Forest Ranger, Washington Forest Reserve (East), Washington.
 SHIRLEY BUCK, Clerk, Cascade Forest Reserve (North), Oregon.
 O. A. MORRISSEY, Assistant Forest Ranger, Lincoln Forest Reserve, New Mexico.
 JOSEPH MILLETT, Assistant Forest Ranger, Grand Canyon Forest Reserve (North), Arizona.
 CYRUS P. SNELL, Assistant Forest Ranger, Salt Lake Forest Reserve, Utah.

SEPARATED.

Reserve Organization.

Guy Jellerson, Forest Guard, Payette Forest Reserve, Idaho.
 Henry Jeffries, Forest Guard, Grantsville Forest Reserve, Utah.
 Robert H. Simonds, Forest Guard, Grand Canyon Forest Reserve (South), Arizona.
 R. H. Gould, Forest Guard, Alexander Archipelago Forest Reserve, Alaska.
 Robert Thompson, Forest Guard, Mount Graham Forest Reserve, Arizona.
 Cyrus Nibley, Forest Guard, Henrys Lake Forest Reserve, Idaho.
 F. M. Jack, Forest Guard, Henrys Lake Forest Reserve, Idaho.

DISMISSED FROM THE SERVICE.

HENRY GRINNELL.

With deep regret announcement is made of the death of two members of the Forest Service:

Mr. JOHN W. McLAIN, Forest Ranger on the San Francisco Mountains Forest Reserve, Arizona, on February 12.

Mr. WARREN O. DAVIS, Forest Student in the Forest Service, on February 20.

SERVICE NOTES FOR MARCH, 1907.

LAW.

Claims.

The geologists from the Geological Survey who have been examining alleged illegal mining claims in the Chiricahua Reserve, Arizona, have finished their work in that reserve and have been sent to examine such claims in the Gila and Big Burros reserves, New Mexico.

Privileges.

The following right-of-way cases, referred from the Department of the Interior to the Forester for report as to whether the projects would interfere with forest reserve interests, were returned to that Department between January 15 and February 15 with favorable reports by the Forester:

City of Grand Junction, pipe line, Battlement Mesa Reserve, Colorado; William Van Pelt, reservoir, Battlement Mesa Reserve; Parker Basin Reservoir Company, reservoirs, Battlement Mesa Reserve; Coon Creek Reservoir Company, reservoirs, Battlement Mesa Reserve; J. E. Hanson, reservoir, Battlement Mesa Reserve; J. Hartley Poage, reservoir, San Juan Reserve, Colorado; Fanny I. Todd, reservoir, Gunnison Reserve, Colorado; Branch Mint Railroad Company, railroad, Black Hills Reserve, South Dakota.

Class B Sales.

Since the law definitely limits the amount of timber which can be sold without advertisement to a stumpage value of not more than \$100, great care should be taken in making Class B sales that the value of the timber cut does not exceed \$100. It is better to make a sale a little under this limit, to allow for a possible excess cutting. Where through poor estimating there is an overcut, the excess should be charged to the original sale in Class B as in Class C sales.

OFFICE OF FOREST MANAGEMENT.

Free-Use Business.

The annual reports on free-use business show that, in round numbers, \$75,000 worth of material has been granted to 15,000 permittees. The Wenaha Reserve in eastern Washington and Oregon leads with a total valuation of over \$5,000. The Henrys Lake, Weiser, and Bear River forest reserves all granted over \$3,500 worth of material. The minimum amount for any one reserve was about \$5. Naturally those reserves which are situated in the heavily timbered parts of Oregon and Washington have the least free-use business, while the figures given above show that reserves which handle the greatest number of free-use permits are located in eastern Washington, southern Idaho, Colorado, and Utah. In the Southwest there are few reserves which granted over \$1,000 worth of material, although on most of them the free-use business was of great importance to the settlers living near the reserves.

Timber Settlements.

Several supervisors have requested information in regard to the handling and closing of timber settlements. In any privilege which involves the cutting or destruction of timber, payment for that timber is required, and timber-sale regulations apply to the cutting. When there is an opportunity to scale the timber, cutting reports should be rendered as in a timber sale—that is, only a single report to the Forester is required if the total value is \$100 or less; if the value is over \$100, monthly reports should be made during the period in which cutting is in progress.

A timber settlement should be reported for closing when cutting is finished and brush properly disposed of (if cutting is done), or when construction work is completed, if no timber is cut. In cases where construction will extend over a long period and no scaling will be possible, if the supervisor is assured that no timber except that included in the estimate will be cut or destroyed, he may report the case for closing when full payment has been made. This will apply to reservoir rights of way in which the timber will not be cut, and to similar cases.

Forest Description Sheets.

It has been found in a great many cases that the supervisors fail to keep duplicates of the forest description sheet in an advertised sale. The absence of this duplicate prevents satisfactory inspection work in the office of the supervisor, and it should be fully understood that supervisors are expected to keep a copy of the forest description on file in their offices.

Silvics.

During the month of February silvical notes upon the following species were collected and placed on file:

Alpine larch (*Larix lyallii*).
Blue spruce (*Picea parryana*).
Lowland fir (*Abies grandis*).
Alpine fir (*Abies lasiocarpa*).
Red fir (*Abies magnifica*).

Bigtree (*Sequoia washingtoniana*).
One-seed juniper (*Juniperus monosperma*).
California juniper (*Juniperus californica*).
Rocky Mountain juniper (*Juniperus scopulorum*).
Pacific yew (*Taxus brevifolia*).

OFFICE OF DENDROLOGY.

[NOTE.—Except when otherwise stated, it is to be understood that observers whose names are given in these notes are members of the Forest Service.]

Western yellow pine (*Pinus ponderosa*).—The range of western yellow pine in the California Coast Ranges has been recently cleared up considerably, but it is still imperfectly known. Dr. C. Hart Merriam, Bureau of Biological Survey, noted it in 1899 on the mountains between Hoopa Valley and Redwood Creek, Humboldt County. The main body of Coast Range yellow pine is reported by S. J. Flinham to extend southward to central Lake County, and westward sparingly in eastern Mendocino County on the headwaters of Eel River. Prof. W. L. Jepson found it on some of the ridges southward into Sonoma and Napa counties, but not on the inner Coast Range bordering Solano and Yolo counties. South of San Francisco Bay it occurs on the Mount Hamilton ranges, and recently scattered trees were seen by S. J. Flinham on the crest of the seaward Coast Range above Woodside and Palo Alto. Further south it was noted by F. G. Plummer and M. G. Goswell, in 1905, on the crest of the Santa Lucia Mountains in the Carmelo, Sur, Arroyo Seco, Nacimiento and San Antonio river basins, while in 1906 Mr. Flinham saw

scattered trees in San Luis Obispo County on the north and south ridges between the Carisso Plains and the valleys where San Luis Obispo and Arroyo Grande are situated. Messrs. Plummer, Goswell, Hatton, and Sterling recently noted it in the Santa Barbara Reserve east of Pine Mountain between Thorn Meadows and Pine Mountain Lodge, and in part of the Alamo Mountain region. It was also seen by Mr. Hatton in the San Gabriel Mountains on Mount Wilson, Pine and Brown Flats, etc., and forming a timber forest from the head of Sheep Creek throughout the Upper Swarthout Valley on to some of the higher portions of the San Gabriel and San Antonio watersheds, as well as in the vicinity of Mount Gleason, in the eastern part of the San Gabriel Reserve. R. D. Craig reports that in the San Bernardino Mountains yellow pine forms the main stand from Little Bear Valley to Sawpit Canyon and occurs less abundantly nearly to Cleghorn Pass and Deep Creek. A range not previously published and just reported by Mr. Flinham for northeastern California is in the northern part of Modoc Reserve, on the Shafer and Warner mountains, and extending from the latter range into Surprise Valley at an elevation of 4,800 feet to within a few miles of the Nevada line.

Limber pine (*Pinus flexilis*).—Two additional new stations for this pine in southern Idaho, west of the Continental Divide, have just been reported by A. E. Oman, forest assistant. One is near the headwaters of Cub and Maple creeks, at an elevation of 7,500 to 8,000 feet, in the Bear River Reserve, and the other is on the summit of Oxford Peak, in the same reserve, at an altitude of 9,000 to 9,500 feet.

Bristle-cone pine (*Pinus aristata*).—Heretofore the southern limit has been in the Culebra Range of Colorado. J. H. Hatton has, however, recently reported that this pine extends southward over the northern part of New Mexico, and H. P. Baker also reports it at 11,000 feet elevation on slopes just below Pecos Baldy Pass in the Pecos River Reserve.

Lodgepole pine (*Pinus murrayana*).—It is surprising that up to the present time no record has been published of the occurrence of lodgepole pine as far east as the Black Hills, South Dakota, the nearest point being several hundred miles farther west. Henry S. Graves supplied the first record of its presence in the southeastern part of the Black Hills by a photograph he took in 1897 of a tree 3 feet in diameter on Squaw Creek. Recently R. P. Imes, technical forest assistant, reported having found a stand of about 40,000 feet of lodgepole pine in sec. 5, T. 2 N., R. 2 E.; also a medium-sized group in sec. 29, T. 3 N., R. 3 E., and a single tree in the northeast quarter section of sec. 27, T. 3 N., R. 3 E.

Sitka spruce (*Picea sitchensis*).—The southmost station now known for this tree is Fort Bragg, on the Mendocino County coast, recently reported by S. J. Flinham. It is hoped that further careful search will be made in this region, where the range of Sitka spruce is believed to be still imperfectly known.

Weeping spruce (*Picea breweriana*).—Until recently this rare and little-known spruce has been known to occur in the western part only of the Siskiyou Mountains, in southern Oregon and northern California. It is supposed to have been found also on Black Butte at the western base of Mount Shasta, in 1863, but it has not been seen there since. Recently the range has been extended southward about 100 miles by Miss Alice Eastwood, of the California Academy of Sciences, and by E. Koch, who discovered groves on Canyon Creek (T. 35 N., R. 10 W.) in the southern Trinity Mountains; while C. J. Buck, R. B. Wilson, and S. J. Flinham recently reported weeping spruce on several mountain ridges in the Klamath and Trinity forest reserves, from one of which specimens were sent to this office for identification.

Further search should extend the range and, it is hoped, rediscover this spruce near Mount Shasta, where Prof. W. H. Brewer found it so long ago.

Tamarack (*Larix laricina*).—The long conjectured occurrence of tamarack in Alaska is now confirmed by the explorations of L. B. Bishop, Biological Survey, and by L. M. Prindle and A. F. Brooks, of the U. S. Geological Survey, who observed it on the

Yukon at the mouth of the Tanana (lat. $65^{\circ} 10'$, long. 152°), over the Tanana Valley and its tributaries (east to long. 146°), and west on the upper Kuskokwim and its tributaries, to about longitude 154° . The last point is the westmost limit now known for tamarack and Minook Creek, tributary of the Yukon in lat. $65^{\circ} 30'$, is the northmost limit known in Alaska. The point farthest to the northwest at which tamarack was previously known to occur is Finlayson Lake (long. $130^{\circ} 30'$, lat. $61^{\circ} 35'$), which is over 500 miles east and over 250 miles south of the Alaska stations recently discovered.

Alpine larch (*Larix lyallii*).—The distribution of this larch is not yet fully known. Its southern range was extended quite recently into Montana and Idaho. Two large tracts were found in 1898 by H. B. Ayres in northern Montana, one on the summit of the Continental Divide above 6,000 feet, extending from the Canadian boundary southward 15 miles to the head of Quartz Creek, and the other, extending along the summits of the Whitefish Mountains south to Whitefish Creek. Two other bodies found in Montana by him in 1899 are the most southern forests known of this tree. One is on the east slope of the Continental Divide, above 7,000 to 8,000 feet, at Camp Creek Pass at the head of the Middle Fork of Sun River, while the other is on the western slope of the Continental Divide at Pend Oreille Pass, on the divide between the Clearwater and West Fork of South Fork of Flathead River. J. B. Leiberg discovered alpine larch in the Bitterroot Forest Reserve of Idaho on the main range of the Bitterroots at elevations above 7,500 feet from Lolo Pass nearly to Nez Perces Pass, and also on the Lochsa-Selway divide above Grave Peak. These points represent the southmost limit known for the tree in Idaho.

In Oregon Prof. C. V. Piper and others have also extended the range of alpine larch southward from Mount Stuart to Mount Hood, in the Cascade Range, where its distribution is still very imperfectly known.

Arizona cypress (*Cupressus arizonica*).—R. G. Willson, Forest Ranger, recently sent specimens for identification of what proves to be this cypress from a new locality. He writes that he found a body of it situated approximately 4 miles northwest of the southeastern corner of the Prescott Forest Reserve, Central Arizona, at an elevation of about 5,500 feet. The grove extends over nearly 160 acres, and lies on the head of the south prong of Rock Creek, the heaviest stand being on the east side of Shamrock Butte. So far as now known Arizona cypress has only a limited and disconnected range on a few mountains in Arizona and northern Mexico. Mention here is due Supervisor F. C. W. Pooler for encouraging Mr. Willson to report this find.

California torreyia (*Tamion californicum*).—Much has been recently added to the hitherto little-known range of this interesting California tree in the Sierras. S. J. Flinham found it on Butte, Chico, and Deer creeks, in Yuba and Tehama counties, thus extending the range 30 miles farther north than the previously recorded northern limit on Upper Yuba and Feather rivers. In 1899 George B. Sudworth noted it in the Stanislaus Reserve on Empire Creek (tributary of South Fork of American River) at 2,500 feet elevation, on north slope of South Fork of Mokelumne River at 2,000 to 2,500 feet, on San Antonio Creek (tributary of south fork of Calaveras River) at 2,000 feet, and on south Fork of Webber Creek at 3,000 feet. Farther south it was observed by Mr. Sudworth in 1900, and several years later by Mr. Flinham, near the Dinkey Bigtree Grove (in T. 10 S., R. 26 E.), in the valley of Mill Creek (tributary of Kings River) in sec. 13, T. 14 S., R. 27 E., in "draws" and canyons along the stage road to the Giant Forest, on the road to Mineral King, on the South Fork of the Kaweah River near the boundary of the Sierra Reserve, along the lower canyon of the Middle Fork of Tule River, and at other points in the lower Kaweah and Tule River canyons, the extreme southern limit being in T. 21 S., R. 30 E.

New Mexican locust (*Robinia neo-mexicana*).—The local distribution of New Mexican locust was recently worked out by F. J. Phillips in the Jemez (northern New

Mexico) and Lincoln reserves (southern New Mexico). A very important result of this study is the discovery that the species occurs as a tree 12 inches through in the Lincoln Reserve on the banks of streams and also on slopes, up to an altitude of 9,700 feet. Previously it was not known to become a tree anywhere except on the Purgatory River near Trinidad, Colo., and to ascend to a higher elevation than about 7,000 feet.

Accessions to the Library—Compiled by the Librarian.

Forestry—General.

Reaping where we have not sown; practical forestry as distinguished from sentimental preservation or stupid destruction; J. W. Helburn. 1906. 12 p. Illus. In American magazine, N. Y., July, 1906.

The saving of national forest waste; T. Cleveland, jr. 1907. 2 p. Illus. From The Pilgrim, Detroit, Mich., February, 1907.

Forest Botany.

Japanische Zwergbäume (Japanese dwarf trees); C. Brick. 1906. 7 p. Hamburg.

Tasmanian forestry; a description of timber trees indigenous to Tasmania, timber products and sawmilling industry; J. C. Penny. 1905. 69 p. Illus. Tasmania—Dep't of lands and surveys.

Educational.

India—Imperial forest school, Dehra Dun. Progress report for 1905-6. 20 p. Office of Sup't of government printing, Calcutta.

Classified list of publications available for distribution February 1, 1907; Forest service. 4 p.

Forest Management.

Working Plans.

Preliminary working plan for the public forest tract of the Insular lumber company, Negros Occidental, P. I.; H. D. Everett and H. N. Whitford. 1906. 54 p. Illus. Bulletin 5 of Philippine Islands—Bureau of forestry, Manila.

Preliminary working plan for the public forest tract of the Mindoro lumber and logging company, Bongabon, Mindoro, P. I.; M. L. Merritt and H. N. Whitford. 1906. 55 p. Illus. Bulletin 6 of Philippine Islands—Bureau of forestry, Manila.

Lumbering.

Opportunities for lumbering in the Philippine Islands; G. P. Ahern. 1906. 5 p. Circular 1 of Philippine Islands—Bureau of forestry, Manila.

Planting.

Le reboisement dans les Alpes-Maritimes (Reforestation in the Maritime Alps); J. Dinner. 1906. 14 p. Impr. de l'Éclaireur, Nice.

Organization and Administration.

California—State forester. First biennial report, 1905-6. 39 p. Sacramento. Field program for February, 1907; the Forest service. 32 p.

Philippine Islands—Bureau of forestry. Annual report, 1905-6. 27 p. Illus., Manila, P. I.

U. S.—Forest service. Report of the forester for 1906. 1907. 43 p.

Forest Reserves.

Location, date of latest proclamation, and area of the national forest reserves in the United States, Alaska, and Porto Rico, February 1, 1907; the Forest service. 4 p.

U. S.—59th Congress—1st session—Senate. Report on Appalachian forest reserve, etc. 1906. 19 p.

Utilization.

Holzproduktion und Holzhandel von Europa, Afrika und Nord-Amerika (Wood production and timber trade of Europe, Africa, and North America); J. Marchet. Vol. 2, 1905. 459 p. W. Frick, Wien.

Woodcraft directory, being a handbook of useful information for all woodworkers. 1907. 139 p. Gardner pub. co., Cleveland, Ohio.

Technology.

1. Mechanical tests, properties, and uses of thirty Philippine woods. 2. Philippine sawmills, lumber market, and prices; R. Gardner. 1906. 69 p. Illus. Bulletin 4 of Philippine Islands—Bureau of forestry, Manila.

Statistics.

- American lumberman's industrial statistics, 1906. The American Lumberman, Chicago.
- Wood used for tight cooperage stock in 1905; H. M. Hale. 1907. 8 p. Circular 53 of the Forest service.

Forest Laws.

- Game, fish, and forestry laws of the State of Tennessee, 1905-1906. 70 p. Tennessee—Department of game, fish, and forestry, Nashville.

Proceedings of Associations.

- Royal Scottish arboricultural society. Transactions, vol. 20, pt. 1, January, 1907. 136 p. Illus. Printed for the society, Edinburgh.

Contents of special interest.

- Planting of high moorlands; J. Stirling-Maxwell.
- Development of a larch crop; A. Murray.
- Forest policy in the British Empire; J. S. G.
- Treatment of timber crops up to middle age; "T."
- Training in silviculture; R. C. M. Ferguson.
- Note on *Larix leptolepis* grown in Japan; K. Kumé.
- On preparing working plans for British woodlands; J. Nisbet.
- Working plan, 1905 to 1919, of the Castle Hill woodlands; F. Story.
- Note on "The Novar system of combating larch disease;" J. Nisbet.
- The large larch sawfly; R. S. MacDougall.
- Prevention of damage by pine weevil; E. S. Grant.
- Creosoting of home-grown timber; W. B. Havelock.
- Creosoting of timber by absorption; J. Balden.
- Notes on continental forestry in 1906; J. Nisbet.
- Forestry exhibitions; J. F. Annand and others.
- Society for the protection of New Hampshire forests. Fourth annual report, 1905-1906. 81 p. Illus. Concord, N. H.

Street and Park Trees.

- Newark—Shade tree commission. Second annual report, 1905. 16 p.

Forest Enemies.**Insects.**

- Departmental notes on insects that affect forestry in India; E. Stebbing. Pt. 2-3, 1903. Illus. Office of Sup't government printing, Calcutta.
- The gypsy and brown tail moths; E. P. Felt. 1906. 42 p. Illus. New York state museum, Albany. Bulletin 103.
- The gypsy moth and how to control it; L. O. Howard. 1907. 22 p. Illus. Farmers' bulletin 275 of U. S. Dep't of agriculture.
- The insects affecting the black locust and hardy catalpa; E. C. Cotton. 1906. 55 p. Illus. Bulletin 7 of Ohio—Dep't of agriculture—Div. of nursery and orchard inspection, Columbus.

Grazing.

- Le pâturage dans les Alpes (Grazing in the Alps); E. Chabrand. 1906. 28 p. Impr. Drevet, Grenoble.

Irrigation.

- Evaporation losses in irrigation and water requirements of crops; S. Fortier. 1907. 64 p. Illus. Bulletin 177 of Office of experiment stations, U. S. Dep't of agriculture.

Geology.

- Essai sur la géologie forestière (Essay on forest geology); A. Schaeffer.

Zoology.

- Grundriss der Zoologie für Forstleute (Sketch of zoology for foresters); A. Jacobi. 1906. 263 p. Illus. Verlag der H. Lauppischen Buchhandlung, Tübingen. 7.50 M.

OFFICE OF FOREST EXTENSION.

A conference of the men in charge of the reserve planting stations was held from February 15 to March 28. All the details of nursery practice and field planting were taken up and ideas exchanged as to the methods adapted to the various lines of work. Conclusions, as far as reached, will be put on record and all of the work of the various stations systematized as far as possible.

Field planting in the reserves of southern California has been finished for the season. A total of nearly 180,000 seedlings have been planted in the mountains under very favorable conditions, since the rainfall has been unusually heavy. About 60,000 of these trees were set by the rangers and the possibilities of extending the planting work through ranger planting are very great.

Through the courtesy of the Bureau of Plant Industry a section of one of their greenhouses has been secured in which to make germination tests of tree seeds. The work was started February 18 and will be continued until practical soil tests have been made of all the seed planted in commercial quantities in reserved nurseries. The aim is to secure a basis for nursery planting, since without these tests practically nothing is known of the germinative energy of the seeds used. While greenhouse tests, even in soil, are bound to be higher than in open nurseries, the tests will closely enough indicate how thickly the seed should be planted.

The spring planting operations have begun in the Gila Reserve. Practically all of the cooperative planting of cottonwood cuttings on the military reservation is completed and 2,000 western yellow pine have also been set out. An experimental plantation of 10,000 trees is also being made on the Cameron Creek watershed within the reserve. Since the rainy season begins in July there is a plan to harden a few thousand seedlings by reducing the water supply and set them in the field in late summer. The Fort Bayard nursery will also furnish seedlings for experimental planting on several other reserves in the Southwest.

OFFICE OF FOREST PRODUCTS.

Central Office for Timber-Test Work.

In the past the timber-test work of the Service has consisted largely in the individual work of the different laboratories. In order to establish closer relations among the laboratories and to more thoroughly coordinate the work a central office is to be established at Washington. This office will have general charge of the work. It will contain complete files of all timber-test data and carry on general studies. Two engineers, with a sufficient number of assistants, will have charge of the work.

OFFICE OF PUBLICATION AND EDUCATION.

Addresses on forest subjects were delivered in February, as follows:

California Federation of Women's Clubs, Bakersfield, Cal., February 8, C. H. Shinn.

Westminster Club, Buffalo, N. Y., February 12, E. A. Sterling.

Dolly Madison Chapter, Daughters of the American Revolution, Washington, D. C., February 12, Gifford Pinchot.

University of Nebraska, Lincoln, Nebr., February 18, R. S. Kellogg.

Illinois State Farmers' Institute, Quincy, Ill., February 19, R. S. Kellogg.

Western Society of Engineers, Chicago, Ill., February 20, R. S. Kellogg.

National Association of Box Manufacturers, Cleveland, Ohio, February 21, R. S. Kellogg.

Kentucky State Farmers' Institute, Shelbyville, Ky., February 27, H. M. Hale.

OFFICE OF RECORD.

Accounts.

Hereafter each remittance received by the special fiscal agent will be immediately acknowledged by form postal card, which will be sent from his office directly to the depositor. This acknowledgment will read as follows: "Your remittance has been received and a certificate of deposit will be sent you in due time," and is intended merely to give the depositor the earliest possible notice that his remittance has reached the special fiscal agent.

The original certificate of deposit will be mailed, as heretofore, to the supervisor. Immediately upon its receipt the supervisor will please make the necessary entries on his record cards and forward the certificate to the depositor. The certificate is merely an acknowledgment of the remittance received, and does not in itself convey any rights to the depositor. It is, therefore, unnecessary for the supervisor to retain the certificate of deposit even where the amount remitted is incorrect, or in cases where an additional deposit or a refund may become necessary.

Use of Form 143.

Supervisors and Acting Supervisors should report their own as well as their assistants' services on Form 143, accompanied by the proper subvoucher. One form is sufficient to report services of all assistants, even though engaged on different reserves, but the subvoucher should show the name of the reserve on which the member is actually serving. Form 2-a, subvoucher, is not designed for the statement of a per diem allowance. Members who receive a per diem allowance in addition to the regular monthly salary can use a Form 3 salary voucher (new series) to state both the salary and per diem. When Form 3 is used in this manner, in lieu of Form 2-a, it should be prepared, numbered, and attached to Form 143.

Memorandum for Supervisors.

The attention of Forest Supervisors is called to Regulation No. 7 of the Use Book.

A great deal of annoyance was caused last year by purchasers making remittances by personal check or drafts on western banks, and by making them payable to persons other than the Special Fiscal Agent. Supervisors should communicate with bankers, postmasters, and express agents in the vicinity of their reserves, and ask their cooperation in securing remittances in the form and manner required by the regulation.

Impress upon purchasers the necessity of forwarding the form letters of transmittal (861) with their remittance; otherwise the remittance has to be held until the proper designation can be secured from the Supervisor.

Delay and inconvenience in making payments at the opening of the grazing season might be avoided, in some cases, if Supervisors will advise postmasters of small money-order offices of the probable demand for money orders, and ask them to secure a sufficient number from the Department in advance. In a number of instances last year depositors were put to considerable trouble and delay for the reason that the supply became exhausted and could not be readily replenished.

The Forest Service will be glad to cooperate in securing the establishment of additional money-order offices in the vicinity of the reserves where needed.

Laborers.

The Civil Service Commission rules that the designation "Laborer" for people who are temporarily employed in the field is not sufficient information to enable that office properly to classify such employees. This term is now used generally by officers in charge in rendering their accounts.

Accounts covering service of laborers must hereafter be accompanied by a statement of the kind of labor performed. Officers in charge of reserves should insert this information against the employee's name on Form 143 in the column of Remarks. Officers and others not on the reserves will insert the information on Form A voucher, when direct settlement is made, or on Form 4, reimbursement voucher. Failure to specify the nature of employment on forms and vouchers will make it necessary that they be returned or held at this office until the information is supplied.

Supplies.

Small articles are often placed, for safe carriage, in boxes containing stationery or other supplies of similar character ordered on the same requisition. In checking invoices careful examination should be made of all packages received before report of shortage is made.

Several forest officers have reported recently that supplies shipped by freight have not been received. Delays in the last two or three months have been largely due to the unusually severe winter and the consequent snow blockade, and to the inability of the railroads to handle shipments promptly, owing to the congestion of traffic and the scarcity of freight cars. There has been complaint all over the country in regard to these delays, and the Government has suffered equally with other shippers. At the request of the Forest Service the depot quartermaster has in many instances traced shipments made to forest officers and located them somewhere on their way to destination. It is seldom, if ever, practicable to hurry freight shipments. The remedy in the hands of forest officers is to allow for the delays incident to the season by making requisition in advance of their requirements.

In making requisition for letter-size transfer cases, for transferring correspondence filed in section 3 of the standard filing case, forest officers should specify the kind of loose-sheet indexes desired. Both alphabetical and special indexes are carried in stock, and the kind needed should be mentioned for the guidance of the property clerk.

OFFICE OF GRAZING.

The committee of stockmen appointed by the President to confer with the Public Lands Commission for the purpose of recommending a plan for the control of grazing on the vacant public lands of the West met in Washington on February 11.

After careful consideration of the subject a report was made to the President recommending that the Secretary of Agriculture be authorized to organize grazing

districts to be administered under rules and regulations similar to those now in force on the forest reserves, the lands to remain open to homestead settlement and all other entry under the public land laws, and all permits or leases to be issued with the understanding that the entry of land would act as a cancellation of the permit or lease for the land so entered, *bona fide* settlers to be allowed to graze free of charge stock used for necessary domestic purposes and to be given an equitable allotment of range adjacent to their homes not later than the beginning of the next annual grazing period.

When applications for grazing permits are approved, a duplicate of Form 762 should be sent to the Forester immediately, but a duplicate of Form 861 is not necessary and should not be sent except when a demand is made upon a person for trespass damages. In this latter event a duplicate of Form 861 should always be forwarded.

It is important whenever any special action is taken in the approval of an application or the issuance of a grazing permit that an explanatory note be made on the lower left-hand corner of the duplicate notice, Form 762, for the information of the Forester.

Applications should not be numbered until they have been acted upon, and those which are disapproved should not be included in the numbered series.

In case the total number of any kind of stock applied for before the date which has been set does not equal the number allotted to the reserve, applications received subsequently may be approved until the total number authorized by the Secretary of Agriculture has been reached.

OFFICE OF RESERVE ORGANIZATION.

Letters to the Forester.

It is not in accordance with Use Book Regulations for forest officers in the field to address letters directly to the Forester. They should address the Forester only through the officer in charge of the reserve to which they are assigned.

Badges.

The attention of forest officers is called to the need for exercising greater care of their badges. They are the official emblem of their authority, and should on no account be lost.

Attention of the forest officers is called to the fact that telegrams relating to leave of absence, salaries, and expense accounts are not official, and will be disallowed by the Auditor in every case. They should be sent prepaid, and the replies by this office will be sent collect.

A standard padlock of the highest quality has been adopted for use on the reserves and may now be obtained on requisition. Since the locks are all fitted by the same key requisitions should state the number of keys that will be needed.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR APRIL, 1907.

The program of fieldwork and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

INSPECTION.

Inspectors not yet assigned to Districts.

F. E. OLMSTED, *Assistant Forester*, Washington, D. C.

COERT DuBOIS, *Forest Inspector*, Paradise, Ariz.

F. W. REED, *Forest Inspector*, Elko, Nev.

J. H. HATTON, *Forest Inspector*, Albuquerque, N. Mex.

D. D. BRONSON, *Forest Inspector*, Washington, D. C.

F. A. SILCOX, *Assistant Forest Inspector*, Thompson Falls, Mont.

Inspection District No. 2.—Colorado, Eastern Wyoming, South Dakota, Nebraska, and Kansas.

SMITH RILEY, *District Inspector*, Denver, Colo.

T. D. WOODBURY, *Assistant Forest Inspector*, Denver, Colo.

Inspection District No. 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, *District Inspector*, Tacoma, Wash.

M. L. ERICKSON, *Assistant Forest Inspector*, Lakeview, Oreg.

F. E. AMES, *Assistant Forest Inspector*, Tacoma, Wash.

WM. L. HALL, *Assistant Forester*, in the Office of the Forester; in charge White Mountain and Appalachian Investigation.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman*, in the Office of the Forester.

LAW.

PHILIP P. WELLS, in Charge.

Claims, A. C. SHAW.

Trespass, G. S. ARNOLD.

Privileges, M. J. McVEAN.

Contracts, C. R. PIERCE.

FOREST MANAGEMENT.

WILLIAM T. COX, Assistant Forester in Charge.

Timber Sales, P. G. REDINGTON, *Forest Inspector*, Acting in Charge.

Silvics, R. ZON, *Forest Assistant*.

Cooperation, A. W. COOPER, *Forest Inspector*.

Inspection.	{	E. E. CARTER, <i>Forest Inspector</i> , Custom-House, Portland, Oreg.
		C. S. CHAPMAN, <i>Forest Inspector</i> , Washington, D. C.
		K. W. WOODWARD, <i>Assistant Forest Inspector</i> , Kalispell, Mont.
		W. G. WEIGLE, <i>Assistant Forest Inspector</i> , Washington, D. C.
		G. M. HOMANS, <i>Assistant Forest Inspector</i> , Custom-House, Portland, Oreg.
		W. E. LA FOUNTAIN, <i>Assistant Lumberman</i> , Northfork, Cal.
		E. M. HAMILTON, <i>Assistant Lumberman</i> , Deadwood, S. Dak.
		A. J. NORTON, <i>Assistant Lumberman</i> , Santa Fe, N. Mex.
G. P. GREGG, <i>Assistant Lumberman</i> , Saratoga, Wyo.		
F. X. SALZMAN, Cass Lake, Minn.		
W. S. UHLER, Cass Lake, Minn.		

PROJECTS.

EXAMINATION OF TIMBER SALES.

Arizona—

San Francisco Mountains National Forest—A. B. RECKNAGEL, Flagstaff.

California—

Diamond Mountains National Forest—W. G. DURBIN, Quincy.

Shasta National Forest—P. T. HARRIS and C. A. GALARNEAU, Sisson.

Sierra National Forest (South)—I. F. ELDREDGE and R. S. POND, Hot Springs.

Idaho—

Sawtooth and Payette National forests—L. L. White, Boise.

Weiser National Forest—L. L. WHITE, Boise.

Montana—

Helena National Forest—J. E. KEACH, Helena.

New Mexico—

Gila National Forest—D. RODMAN, Silver City.

South Dakota—

Black Hills National Forest—H. C. NEEL, Deadwood.

Wyoming—

Yellowstone National Forest (Shoshone Division)—R. Y. STUART, Wapiti.

COOPERATIVE.

Delaware—

Study of forest conditions in cooperation with the State of Delaware—W. D. STERRETT, care Agricultural Experiment Station, Newark.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Hampshire—

Examination of woodlots and timber tracts—BENTON MACKEYE, Nashua.

North Carolina—

Examining and marking timber for cutting, in cooperation with the Mountain Retreat Association—J. S. HOLMES, Montreat.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Odanah.

Northeastern States—

Examination of woodlots and timber tracts—WESLEY BRADFELD, Washington, D. C.

Western States—

Preliminary mill-scale study of western yellow pine—L. MARGOLIN, Flagstaff, Ariz.

DENDROLOGY.

GEO. B. SUDWORTH, Assistant Forester, in Charge.

PROJECTS.**California—**

Study of tanbark trees of Pacific coast—Prof. W. L. JEPSON; permanent address, Berkeley.

Special studies of little-known California trees—four-leaf pine, Torrey pine, Bishop pine—Prof. W. R. DUDLEY, Leland Stanford University.

Florida—

Study of improved method of turpentineing, in cooperation with the Hillman-Sutherland Land Company—FRANK KLARPP, Green Cove Springs.

North Carolina—

Study of characteristics of turpentine derived from American pines, in cooperation with the Department of Chemistry, University of North Carolina—WILLIAM S. DICKSON, (directed by Dr. CHAS. H. HERTY, Professor of Chemistry), Chapel Hill.

Texas—

Study of desert junipers—Prof. W. L. BRAY; permanent address, Austin.

FOREST EXTENSION.

SAMUEL N. SPRING, Assistant Forest Inspector, Acting in Charge.

Inspection, {G. W. PEAVY, *in Charge*, Pasadena, Cal.
 {G. B. LULL, Sacramento, Cal.

Cooperative Planting, S. B. DETWILER, Acting in Charge.

Reserve Planting, L. C. MILLER.

PROJECTS.**NURSERY AND PLANTING WORK.****California—**

Santa Barbara National Forest—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara.

San Gabriel National Forest—E. C. CLIFFORD, Pasadena.

Kansas—

Garden City National Forest—L. BESLEY, Garden City.

Nebraska—

Dismal River National Forest—W. H. MAST, Halsey.

New Mexico—

Gila National Forest and the Fort Bayard Military Reservation—W. B. HADLEY; assistant, W. D. HAYES, Fort Bayard.

Lincoln National Forest—F. J. PHILLIPS; assistant, H. C. TURNER, care JOHN KERR, Capitan.

COOPERATIVE.

Hawaii—

Experimental Planting—R. S. HOSMER, Honolulu.

GENERAL STUDIES.

Preparation of reports and compilation of data on planting stations—J. M. FETHEROLF, Washington, D. C.

Preparation of report on forest planting in California—S. J. FLINTHAM, Washington, D. C.

Germination Tests of Forest Tree Seeds—W. H. von BAYER, Washington, D. C.

Regional Study: Forest Planting in Ohio and Indiana—A. S. PECK, Washington, D. C.

FOREST PRODUCTS.

R. S. KELLOGG, Forest Inspector, Acting in Charge.

Forest Measurements, JOHN FOLEY.

Wood Preservation, CARL G. CRAWFORD.

Wood Chemistry, A. L. DEAN.

Wood Utilization, M. CLINE, Acting in Charge.

Reserve Engineering, W. E. HERRING.

PROJECTS.**California—**

Tests of the strength of eucalyptus wood, in cooperation with the State and the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistant, O. T. SWAN.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, FREDERICK DUNLAP and CORNELIUS BARRY.

Experiments in wood preservatives—A. L. DEAN, Sheffield Scientific School, Yale University, New Haven; assistants, ERNEST BATEMAN and D. C. PARMELEE.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, H. S. BETTS and J. A. NEWLIN.

Maryland—

Experimental treatment of chestnut telephone poles, in cooperation with the American Telephone and Telegraph Company—H. F. WEISS, Parkton; assistants, H. A. PAUL and C. J. HUMPHREY.

Massachusetts—

Studies of the value of the various woods for pulp—A. D. LITTLE, 93 Broad street, Boston, and H. S. BRISTOL, 74 Pinckney street, Boston.

Montana—

The laying of an experimental track with western tamarack and Douglas fir to test the value of seasoning and treating, and various devices for reducing the mechanical wear of the rails; in cooperation with the Northern Pacific Railway Company—W. H. KEMPFER, McGowan Hotel, Plains.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Virginia—

Experiments in treating loblolly pine cross arms, in cooperation with the American Telephone and Telegraph Company—W. F. SHERFESSEE, Norfolk; assistant, M. C. JENSEN.

Washington—

Tests of western hemlock and National-forest timbers, in cooperation with the University of Washington—ROLF THELEN, University Station, Seattle; assistant, H. S. SACKETT.

General Studies—

Collection of statistics of forest products for the year 1906, in cooperation with the Bureau of the Census—H. M. HALE, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of lumber prices—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—W. C. GEER, New Haven, Conn.

Study of woods used in the vehicle industry—H. B. HOLROYD, Washington, D. C.

Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.

Study of creosote production—C. L. HILL, Washington, D. C.

PUBLICATION AND EDUCATION.

HERBERT A. SMITH, Editor, in Charge.

Review, FINDLEY BURNS.

Information, TREADWELL CLEVELAND, Jr.

Education, HERBERT A. SMITH.

Printing, QUINCY R. CRAFT.

PUBLICATIONS IN MARCH.

Bulletin 74.—Statistics of Forest Products of the United States, 1905.

Circular 76.—Silver Maple.

Circular 80.—Fractional Distillation of Coal-Tar Creosote.

Press Bulletin 150.—Cedar Wood for Lead Pencils.

Press Bulletin 151.—The Secretary of Agriculture on Grazing in the National Forests.

RECORD.

JAMES B. ADAMS, Special Fiscal Agent, in Charge.

Maintenance, GEO. G. ANDERSON.

Accounts, GEO. E. KING.

Purchase, HARRY C. TOWERS.

GRAZING.

A. F. POTTER, Inspector of Grazing, in Charge.

Inspection, { C. H. ADAMS, Washington, D. C.
W. C. CLOS, Washington, D. C.
J. K. CAMPBELL, Washington, D. C.

NATIONAL FOREST ORGANIZATION.

R. E. BENEDICT, Forest Inspector, in Charge.

NATIONAL FORESTS.

NORTHERN DISTRICT.

GEO. H. CECIL, Forest Assistant, in Charge.

IDAHO.

- Bear River National Forest—**W. W. CLARK**, Acting Forest Supervisor, Logan, Utah.
 Bitter Root National Forest—**F. A. FENN**, Forest Supervisor, Kooskia.
 Caribou National Forest—**J. T. WEDEMEYER**, Acting Forest Supervisor, Soda Springs.
 Cassia National Forest—**P. T. WRENSTED**, Forest Supervisor, Pocatello.
 Coeur d'Alene National Forest—**RICHARD H. RUTLEDGE**, Acting Forest Supervisor, Wallace; **DORR SKEELS**, Forest Assistant, Wallace.
 Henrys Lake National Forest—**HOMER E. FENN**, Forest Supervisor, St. Anthony; **J. F. BRUINS**, Forest Assistant, St. Anthony.
 Lemhi National Forest (North)—**GEO. G. BENTZ**, Acting Forest Supervisor, Salmon City.
 Lemhi National Forest (South)—**GUY B. MAINS**, Forest Supervisor, Mackay.
 Palouse National Forest—**R. H. RUTLEDGE**, Acting Forest Supervisor, Wallace.
 Payette National Forest—**Emil A. GRANDJEAN**, Acting Forest Supervisor, Boise; **C. E. DUNSTON**, Forest Assistant, Boise.
 Pocatello National Forest—**P. T. WRENSTED**, Forest Supervisor, Pocatello.
 Port Neuf National Forest—**P. T. WRENSTED**, Forest Supervisor, Pocatello.
 Priest River National Forest—**B. F. McCONNELL**, Forest Supervisor, Priest River; **R. L. FROMME**, Forest Assistant, Priest River.
 Raft River National Forest—**P. T. WRENSTED**, Forest Supervisor, Pocatello.
 Salmon River National Forest—**GEO. G. BENTZ**, Acting Forest Supervisor, Salmon City.
 Sawtooth National Forest—**Emil A. GRANDJEAN**, Acting Forest Supervisor, Boise; **C. E. DUNSTON**, Forest Assistant, Boise.
 Weiser National Forest—**JOHN B. LAFFERTY**, Forest Supervisor, Weiser.
 Yellowstone National Forest (Idaho Division)—**HOMER FENN**, Forest Supervisor, St. Anthony.

MINNESOTA.

- Minnesota Forest Reserve—**G. E. MARSHALL**, Acting Forest Supervisor, Cass Lake.

MONTANA.

- Big Belt National Forest—**R. W. STUART**, Forest Supervisor, Townsend; **M. N. STICKNEY**, Forest Assistant, Helena.
 Big Hole National Forest (Northern Division)—**C. K. WYMAN**, Acting Forest Supervisor, Dillon.
 Big Hole National Forest (Southern Division)—**J. B. SEELY**, Acting Forest Supervisor, Sheridan.
 Bitter Root National Forest (Montana Division)—**ELERS KOCH**, Forest Supervisor, Missoula; **W. W. WHITE**, Forest Assistant, Anaconda.
 Cabinet National Forest (North)—**D. G. KINNEY**, Forest Supervisor, Libby.
 Cabinet National Forest (South)—**F. A. SILCOX**, Acting Forest Supervisor, Thompson Falls.
 Crazy Mountains National Forest—**E. C. RUSSELL**, Forest Supervisor, Livingston.

Ekalaka National Forest—A. W. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak.

Elkhorn National Forest—R. W. STUART, Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant, Helena.

Gallatin National Forest—DAVID CONKLING, Forest Supervisor, Bozeman.

Helena National Forest—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant, Helena.

Hell Gate National Forest (east of Bitter Root Slope)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; W. W. WHITE, Forest Assistant, Anaconda.

Hell Gate National Forest (Bitter Root Slope)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Anaconda.

Highwood Mountains National Forest—JAMES G. THAIN, Forest Supervisor, Highwood.

Kootenai National Forest—D. G. KINNEY, Forest Supervisor, Libby.

Lewis and Clark National Forest (Northern Division)—F. N. HAINES, Forest Supervisor, Kalispell.

Lewis and Clark National Forest (Southern Division)—PAGE S. BUNKER, Forest Supervisor, Kalispell.

Little Belt National Forest—IRA E. TODD, Forest Supervisor, Neihart.

Lolo National Forest—ELERS KOCH, Forest Supervisor, Missoula.

Long Pine National Forest—A. W. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak.

Madison National Forest—J. B. SEELY, Forest Supervisor, Sheridan.

Missoula National Forest—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Pryor Mountains National Forest—H. W. THURSTON, Acting Forest Supervisor, Wapiti,

Snowy Mountains National Forest—IRA E. TODD, Forest Supervisor, Neihart.

Yellowstone National Forest (Absaroka Division)—E. C. RUSSELL, Forest Supervisor, Livingston; BERT P. KIRKLAND, Forest Assistant.

SOUTH DAKOTA.

Black Hills National Forest—J. F. SMITH, Forest Supervisor, Deadwood; R. P. IMES, Assistant Forest Inspector, Deadwood.

Cave Hills National Forest—A. W. BALLINGER, Acting Forest Supervisor, Camp Crook.

Short Pine National Forest—A. W. BALLINGER, Acting Forest Supervisor, Camp Crook.

Slim Buttes National Forest—A. W. BALLINGER, Acting Forest Supervisor, Camp Crook.

WYOMING.

Bear Lodge National Forest—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.

Big Horn National Forest—W. E. JACKSON, Forest Supervisor, Big Horn.

Medicine Bow National Forest (Wyoming)—C. G. SMITH, Acting Forest Supervisor, Saratoga.

Sierra Madre National Forest—C. G. SMITH, Acting Forest Supervisor, Saratoga.

Yellowstone National Forest (Wind River Division)—ZEPH JONES, Forest Supervisor, Pinedale.

Yellowstone National Forest (Teton Division)—ROBERT E. MILLER, Forest Supervisor, Jackson.

Yellowstone National Forest (Shoshone Division)—W. H. PEARCE, Forest Supervisor, Wapiti.

SOUTHERN DISTRICT.

F. C. W. POOLER, Forest Supervisor, in Charge.

ARIZONA.

Baboquivari National Forest—R. J. SELKIRK, Acting Forest Supervisor, Tucson.

Black Mesa National Forest—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Chiricahua National Forest—C. T. McGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant, Paradise.

Grand Canyon National Forest (Northern Division)—SELDEN F. HARRIS, Forest Supervisor, Fredonia; LORUM PRATT, Deputy Forest Supervisor.

Grand Canyon National Forest (Southern Division)—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Huachuca National Forest—R. A. RODGERS, Acting Forest Supervisor, Nogales.

Mount Graham National Forest—H. A. E. MARSHALL, Forest Supervisor, Safford.

Pinal Mountains National Forest—H. A. E. MARSHALL, Forest Supervisor, Safford.

Prescott National Forest—C. H. HINDERER, Acting Forest Supervisor, Prescott.

San Francisco Mountains National Forest—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Santa Rita National Forest—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.

Santa Catalina National Forest—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant, Paradise.

Tonto National Forest—W. H. REED, Forest Supervisor, Roosevelt.

Tumacacori National Forest—R. A. RODGERS, Acting Forest Supervisor, Nogales.

COLORADO.

Battlement Mesa National Forest—DAVID ANDERSON, Acting Forest Supervisor, Collbran.

Cochetopa National Forest—EUGENE WILLIAMS, Forest Supervisor, Moffat.

Fruita National Forest—H. K. PORTER, Forest Supervisor, Delta.

Gunnison National Forest—WM. R. KREUTZER, Forest Supervisor, Gunnison.

Holy Cross National Forest—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; F. H. MORRILL, Forest Assistant, Glenwood Springs.

Leadville National Forest—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant, Leadville.

Medicine Bow National Forest (Colorado Division)—SHEP N. HUSTED, Forest Supervisor, Estes Park.

Montezuma National Forest—H. N. WHEELER, Forest Supervisor, Durango.

Ouray National Forest—H. K. PORTER, Forest Supervisor, Delta.

Park Range National Forest—THOMAS HOGAN, Forest Supervisor, Kremmling.

Pikes Peak National Forest—MARK G. WOODRUFF, Forest Supervisor, Denver.

San Isabel National Forest—C. J. STOHL, Acting Forest Supervisor, Westcliffe.

San Juan National Forest—F. C. SPENCER, Forest Supervisor, Monte Vista.

Uncompahgre National Forest—H. K. PORTER, Forest Supervisor, Delta.

Wet Mountains National Forest—C. J. STOHL, Acting Forest Supervisor, Westcliffe.

White River National Forest—JAMES A. BLAIR, Forest Supervisor, Meeker.

NEBRASKA.

Niobrara National Forest—C. A. SCOTT, Forest Supervisor; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey.

Dismal River National Forest—C. A. SCOTT, Forest Supervisor; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey.

North Platte National Forest—C. A. SCOTT, Forest Supervisor, Halsey.

NEW MEXICO.

Big Burro National Forest—R. C. McCLURE, Silver City.

Gallinas National Forest—JAS. H. KINNEY, Forest Supervisor, Capitan.

Gila National Forest—R. C. McCLURE, Forest Supervisor, Silver City; A. O. WAHA, Forest Assistant, Silver City; M. SMITH, Forest Assistant, Silver City.

Jemez National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Lincoln National Forest—JAS. H. KINNEY, Acting Forest Supervisor, Capitan.

Magdalena National Forest—JOHN KERR, Forest Supervisor, Magdalena.

Manzano National Forest—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque.

Mount Taylor National Forest—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque.

Peloncillo National Forest—C. T. McGLONE, Forest Supervisor, Paradise, Ariz.

Pecos River National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Portales National Forest—ROSS McMILLAN, Forest Supervisor, Portales.

San Mateo National Forest—JOHN KERR, Forest Supervisor, Magdalena.

Taos National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe.

OKLAHOMA.

Wichita National Forest—E. F. MORRISSEY, Forest Supervisor, Cache.

UTAH.

Aquarius National Forest—GEO. H. BARNEY, Forest Supervisor, Escalante.

Bear River National Forest—W. W. CLARK, Acting Forest Supervisor, Logan.

Beaver National Forest—WILLIAM HURST, Forest Supervisor, Beaver.

Dixie National Forest—CHAS. G. Y. HIGGINS, Forest Supervisor, St. George.

Fillmore National Forest—WILLIAM HURST, Forest Supervisor, Beaver.

Fish Lake National Forest—N. E. SNELL, Acting Forest Supervisor, Salina.

Glenwood National Forest—N. E. SNELL, Acting Forest Supervisor, Salina.

Grantsville National Forest—C. F. COOLEY, Forest Supervisor, Grantsville.

La Sal National Forest—ORRIN C. SNOW, Forest Supervisor, Moab.

Manti National Forest—A. W. JENSEN, Forest Supervisor, Ephraim.

Monticello National Forest—ORRIN C. SNOW, Forest Supervisor, Moab.

Payson National Forest—DAN S. PACK, Forest Supervisor, Payson.

Salt Lake National Forest—E. H. CLARKE, Forest Supervisor, Murray.

Sevier National Forest—TIMOTHY C. HOYT, Forest Supervisor, Parowan.

Uinta National Forest—WILLARD I. PACK, Forest Supervisor, Provo; W. JONES BOWEN, Deputy Forest Supervisor, Spanish Forks; H. F. STUDLEY, Forest Assistant, Provo.

Vernon National Forest—C. F. COOLEY, Forest Supervisor, Grantsville.

Wasatch National Forest—E. H. CLARKE, Forest Supervisor, Murray.

WESTERN DISTRICT.

A. R. POWERS, Forest Assistant, in Charge.

ALASKA.

Alexander Archipelago and Afognak National forests—W. A. LANGILLE, Forest Supervisor, Ketchikan.

CALIFORNIA.

Diamond Mountain National Forest—J. A. BARRETT, Forest Supervisor, Quincy.

Klamath National Forest—R. L. P. BIGELOW, Forest Supervisor, Yreka.

Lassen Peak National Forest—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor, Quincy.

Modoc National Forest—A. H. HOGUE, Forest Supervisor, Alturas.

Monterey National Forest—N. O. TORSTENSON, Forest Supervisor, Salinas.

Pinnacles National Forest—N. O. TORSTENSON, Forest Supervisor, Salinas.

Plumas National Forest—L. A. BARRETT, Forest Supervisor, Quincy.

San Bernardino National Forest—R. H. CHARLTON, Forest Supervisor, Los Angeles.

San Gabriel National Forest—R. H. CHARLTON, Forest Supervisor, Los Angeles; B. H. CROW, Forest Ranger, Pasadena.

San Jacinto National Forest—J. R. BELL, Forest Supervisor, Hemet.

San Luis Obispo National Forest—E. S. MAINWARING, Forest Supervisor, San Luis Obispo.

Santa Barbara National Forest—W. M. SLOSSON, Forest Supervisor, Santa Barbara.

Shasta National Forest—G. A. COLEMAN, Forest Supervisor, Sisson; R. C. HACKLEY, Forest Assistant, Sisson.

Sierra National Forest (Northern Division)—C. H. SHINN, Forest Supervisor, Northfork; H. J. THOMPSON, Assistant Forest Inspector, Northfork.

Sierra National Forest (Southern Division)—W. B. GREELEY, Forest Supervisor, Hot Springs, Tulare County.

Stanislaus National Forest—S. L. N. ELLIS, Forest Supervisor, Sonora.

Stony Creek National Forest—MADISON B. ELLIOTT, Elk Creek.

Tahoe National Forest—JNO. C. WELLS, Acting Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant, Nevada City.

Trabuco Canyon National Forest—J. R. BELL, Forest Supervisor, Hemet.

Trinity National Forest—F. H. HAFLEY, Forest Supervisor, Weaverville.

Warner Mountains National Forest—A. H. HOGUE, Forest Supervisor, Alturas.

NEVADA.

Charleston National Forest—DAVID BARNETT, Acting Forest Supervisor, Las Vegas; D. S. MARSHALL, Deputy Forest Supervisor, Las Vegas.

Independence National Forest—F. W. REED, Acting Forest Supervisor, Elko.

Ruby Mountains National Forest—F. W. REED, Acting Forest Supervisor, Elko.

OREGON.

Ashland National Forest—S. C. BARTRUM, Forest Supervisor, Roseburg; R. H. HAMMATT, Forest Assistant, Roseburg.

Blue Mountains National Forest (Western Division)—A. S. IRELAND, Forest Supervisor, Prineville.

Blue Mountains National Forest (Eastern Division)—HENRY IRELAND, Forest Supervisor; C. R. SEITZ, Deputy Forest Supervisor, Sumpter; H. D. FOSTER, Forest Assistant.

Bull Run National Forest—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.

Cascade National Forest (Northern Division)—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.

Cascade National Forest (Southern Division)—S. C. BARTRUM, Forest Supervisor, Roseburg.

Freemont National Forest—M. L. ERICKSON, Acting Forest Supervisor, Lakeview.

Goose Lake National Forest—M. L. ERICKSON, Acting Forest Supervisor, Lakeview.

Innaha National Forest—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Heppner National Forest—D. B. SELLER, Acting Forest Supervisor, Heppner.

Innaha National Forest—H. K. O'BRIEN, Forest Supervisor, Wallowa.

Maury Mountains National Forest—A. S. IRELAND, Forest Supervisor, Prineville.

Siskiyou National Forest—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.

Wenaha National Forest—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash.

WASHINGTON.

Mount Rainier National Forest—G. F. ALLEN, Forest Supervisor, Orting; C. H. FLORY, Forest Assistant, Orting.

Olympic National Forest—FRED HANSON, Forest Supervisor, Hoodspport.

Priest River National Forest—B. F. McCONNELL, Forest Supervisor, Priest River, Idaho.

Wenaha National Forest—J. M. SCHMITZ, Forest Supervisor, Walla Walla.

Washington National Forest (Western Division)—G. B. COLEMAN, Forest Supervisor, Sumas.

Washington National Forest (Eastern Division)—G. W. MILHAM, Forest Supervisor, Chelan.

National Forest Boundaries, CLYDE LEAVITT.

Compilation, R. V. R. REYNOLDS.

PROJECTS.

Examination of proposed National Forests and additions to and eliminations from existing National Forests, and examinations of agricultural land in National Forests under act of June 11, 1906—W. H. B. KENT, in Charge, Hotel Kenyon, Salt Lake City, Utah:

Arizona—

STANTON G. SMITH and JOHN W. FARMER, Flagstaff.

California—

R. W. AYRES, South Pasadena; C. J. BUCK, Yreka; J. D. GUTHRIE, Weaverville.

Colorado—

W. J. MORRILL, Glenwood Springs; E. W. SHAW, Durango; F. D. WHITNEY, 814 E. San Miguel st., Colorado Springs.

Hawaii—

R. S. HOSMER, Honolulu.

New Mexico—

W. C. HODGE, Santa Fe.

Oregon—

L. VON WERNSTED, The Dalles; A. C. RINGLAND, Custom-House, Portland; H. O. STABLER, Hotel Oregon, Portland; J. H. CLARK, Custom-House, Portland.

South Dakota—

PAUL D. KELLETER and C. W. FITZGERALD, Deadwood.

Washington—

H. F. STUDLEY, Hotel Tacoma, Tacoma; LEE A. HARRIS, Chelan.

Surveys of boundaries of existing National Forests:

California—

F. E. JOY, Sisson.

SERVICE CHANGES FOR MARCH, 1907.

APPOINTED.

Law—

Miss SUSIE E. CARTER, Clerk.

Forest Management—

F. X. SALZMAN, Assistant Lumberman.

Forest Products—

W. E. HERRING, Constructing Engineer.

Miss A. E. FOWLER, Draftsman.

Miss J. Q. WHELAN, Clerk.

Record—

Miss MAY C. MAXON, Clerk.

Miss MAY A. LAMBERT, Clerk.

Miss JENNIE C. EISENSTEIN, Clerk.

Miss KATHLEEN M. RILEY, Clerk.

Miss FAITH FARQUHAR, Clerk.

Miss LENA DANIEL, Clerk.

W. T. YOUNG, Unskilled Laborer.

Grazing—

Mrs. MINNIE L. JOYNT, Clerk.

Miss EMILY F. BRYAN, Stenographer.

J. K. CAMPBELL, Inspector of Grazing.

Reserve Organization—

LA MOREE BESLEY, Forest Planting Assistant.

B. R. H. D'ALLEMAND, Forest Planting Assistant. Appointment as Assistant Forest Expert in the office of Forest Extension terminated.

ROBERT W. STUART, Forest Supervisor, Big Belt and Elkhorn National forests, Montana.

GEORGE RING, Forest Ranger, Bitter Root National Forest, Idaho.

RESS PHILLIPS, Deputy Forest Ranger, San Juan National Forest, Colorado.

JOHN H. CLACK, Deputy Forest Ranger, Lewis and Clark National Forest (South), Montana.

MABLE G. COPE, Clerk, Weiser Forest, Idaho.

J. P. BUTLER, Clerk, Sierra National Forest (South), California.

JOHN THOMSON, Clerk, Lincoln National Forest, New Mexico.

The following were appointed Assistant Forest Rangers:

PORTER H. SISNEY, Jemez National Forest, New Mexico.

JOHN W. HAYES, Jr., Lemhi National Forest, Idaho.

JOHN RIIS, Monticello National Forest, Utah.

FREDERICK WINN, San Mateo National Forest, New Mexico.

L. A. SHARTZER, Jemez National Forest, New Mexico.

JOHN PERKINS, White River National Forest, Colorado.

FRANK D. HAUN, Missoula National Forest, Montana.

JOSE M. CHOVEZ, Jr., Jemez National Forest, New Mexico.

JOEL J. WESTFALL, Sierra National Forest (North), California.

GEORGE C. WIDMAN, San Juan National Forest, Colorado.

W. C. NEFF, Goose Lake National Forest, Oregon.

GEORGE A. BONEBRAKE, Goose Lake National Forest, Oregon.

FRANK P. KELTY, Sierra National Forest (North), California.

FRANK P. SOBEY, Pikes Peak National Forest, Colorado.

ROY DAME, Fillmore National Forest, Utah.

HIRAM R. WILCOX, Cascade National Forest (North), Oregon.

W. L. GRIBBLE, Cascade National Forest (North), Oregon.

The following were appointed forest guards:

ALBERT BAKER, Wenaha National Forest, Washington.
 H. C. HALL, Jemez National Forest, New Mexico.
 H. C. VILES, Pecos River National Forest, New Mexico.
 LOUIS E. THOMPSON, Jemez National Forest, New Mexico.
 FRANK P. COLE, Baboquivari National Forest, Arizona.
 ANDREW PETERSON, High Wood Mountains National Forest, Montana.
 B. F. LANNEAU, Park Range National Forest, Colorado.
 F. G. BLAKE, Jemez National Forest, New Mexico.
 HECTOR F. ERWIN, Weiser National Forest, Idaho.
 WILLIAM S. PADDOCK, Weiser National Forest, Idaho.
 FRED RUTLEDGE, Weiser National Forest, Idaho.
 DANL. MCLEOD, Sierra National Forest (North), California.
 LEONARD OERTLI, Hell Gate National Forest, Montana.
 J. F. CONNOR, Black Hills National Forest, South Dakota.
 G. A. BAKER, Lolo National Forest, Montana.
 H. H. LONG, Lemhi National Forest, Idaho.
 JAMES T. OWENS, Grand Canyon National Forest (North), Arizona.
 E. D. PILANT, Payette National Forest, Idaho.
 ARLIE J. BIRDSSELL, Wenaha National Forest, Washington.
 ROY MOSS, Wenaha National Forest, Washington.
 EARL PARK, Wenaha, National Forest Washington.
 CLINTON B. PAYNE, North Platte National Forest, Nebraska.
 HARVEY M. CLUFF, Manzano National Forest, New Mexico.
 A. W. BARTLETT, Sierra National Forest (North), California.
 J. W. DAILEY, Black Hills National Forest, South Dakota.
 JOSEPH JOHNSON, San Bernardino National Forest, California.
 H. E. DELANY, Peloncillo National Forest, Arizona.
 MYRON CAMPBELL, Madison National Forest, Montana.
 HARRY CROXFORD, Rainier National Reserve, Washington.
 WILLIAM O. POSTEL, Yellowstone National Forest (Wind River Division), Wyoming.
 WARREN HASTON, Gila National Forest, New Mexico.
 E. H. MORRISSEY, Wichita National Forest, Oklahoma.
 J. S. WHITLATCH, Sawtooth National Forest, Idaho.
 FRANK E. GINTZ, Prescott National Forest, Arizona.
 L. E. THOMAS, Garden City National Forest, Kansas.
 CARL B. ARENTSON, Lemhi National Forest, Idaho.
 EARL HALVORSEN, Washington National Forest (East), Washington.
 GEORGE WOOLRIDGE, Siskiyou National Forest, Oregon.
 GEORGE F. RANNEY, Bighole National Forest (North), Montana.
 FRED G. HART, Snowy Mountains National Forest, Montana.
 E. L. BREIDENSTEIN, Sawtooth National Forest, Idaho.
 WILLIAM H. CRISWELL, Gila National Forest, New Mexico.
 JOHN JONES, Big Burro National Forest, New Mexico.
 PERCY A. SOUTH, Cascade National Forest (North), Oregon.
 BERT PHILLIPS, Taos National Forest, New Mexico.
 HARRY EUGENE MATTHEWS, Charleston National Forest, Nevada.
 STEPHEN C. MAHONEY, Raft River National Forest, Idaho.
 ALBERT L. SLOAT, Port Neuf National Forest, Idaho.
 JOHN H. COOK, Raft River National Forest, Idaho.
 ARTHUR E. MOODY, Tumacacori National Forest, Arizona.
 LEWIS JOHNSON, San Gabriel National Forest, California.
 GEORGE K. PRADE, Mount Taylor National Forest, New Mexico.
 FRANK A. BOUL, Charleston National Forest, Nevada.

HENRY L. JENNINGS, Magdalena National Forest, New Mexico.
 DAVID B. HILTON, Black Hills National Forest, South Dakota.
 W. L. BAKER, Payette National Forest, Idaho.
 ROYSTON J. SOARDS, Coeur d'Alene National Forest, Idaho.
 R. N. GRIBBLE, Cascade National Forest (North), Oregon.
 C. L. BARBER, Sawtooth National Forest, Idaho.
 JOSEPH BABINGTON, Sawtooth National Forest, Idaho.
 THOMAS EVANS, Weiser National Forest, Idaho.
 ARTHUR V. ROBERTSON, Weiser National Forest, Idaho.

PROMOTED.

Law—

A. C. SHAW, from Expert to Principal Examiner.

Reserve Organization—

C. A. SCOTT, Forest Supervisor.
 JOHN H. PATTERSON, Deputy Forest Ranger, Pikes Peak National Forest, Colorado.
 PERCY GARDNER, Forest Ranger, Trinity National Forest, California.
 SAMUEL E. SWENNING, Forest Ranger, Cascade National Forest (South), Oregon.
 CLARENCE B. SWIM, Deputy Forest Ranger, Yellowstone National Forest (Shoshone Division), Wyoming.
 EDWARD C. THENON, Deputy Forest Ranger, Bitter Root National Forest, Idaho.
 RICHARD H. RUTLEDGE, Supervisor, Coeur d'Alene and Palouse National forests, Idaho.
 A. G. HICKS, Assistant Forest Ranger, Cochetopa National Forest, Colorado.
 C. K. WYMAN, Deputy Forest Supervisor, Bighole National Forest, Montana.

RESTORED FROM FURLOUGH.

Forest Management—

WILLIAM BRIDGE PIPER.

Reserve Organization—

B. E. MATTSSON, Assistant Forest Ranger, Manti National Forest, Utah.
 ALBERT E. REDSTONE, Assistant Forest Ranger, Sierra National Forest (North), California.
 WALTER F. BOWERS, Assistant Forest Ranger, Cochetopa National Forest, Colorado.
 C. H. YOUNG, Forest Ranger, Cascade National Forest (South), Oregon.
 EDWARD C. THIENON, Assistant Forest Ranger, Bitter Root National Forest, Idaho.
 JOHN R. HUGHES, Assistant Forest Ranger, Battlement Mesa National Forest, Colorado.
 EMERY J. FINCH, Assistant Forest Ranger, Olympic National Forest, Washington.
 J. J. PORTER, Deputy Forest Ranger, Aquarius National Forest, Utah.
 OLUF NEILSON, Assistant Forest Ranger, Glenwood National Forest, Utah.
 JOHN BARNARD, Assistant Forest Ranger, Fish Lake National Forest, Utah.
 HIRAM MCNEILL, Assistant Forest Ranger, Washington National Forest (East), Washington.
 J. E. REA, Assistant Forest Ranger, Sierra National Forest (North), California.
 CHARLES C. WRIGHT, Assistant Forest Ranger, Hell Gate National Forest, Montana.
 ELMER W. GRIBBLE, Deputy Forest Ranger, Cascade National Forest (North), Oregon.

TRANSFERRED.**Reserve Organization—**

GEORGE M. INGRAM, Forest Ranger, from Cascade National Forest, Oregon, to Goose Lake National Forest (South), Oregon.

HUGH M. GUTHRIE, Assistant Forest Ranger, from Cascade National Forest (North), Oregon, to Siskiyou National Forest, Oregon.

H. J. TOMPKINS, Assistant Forest Inspector, from National Forest Boundaries to Sierra National Forest (North).

D. D. BRONSON, Forest Supervisor, from Cascade (North) and Bull Run National forests to Inspection.

T. D. WOODBURY, Assistant Forest Inspector, from Pikes Peak National Forest to General Inspection.

GEORGE L. JEFFREY, Clerk, from Government Printing Office to Office of Supervisor, Gila National Forest, New Mexico.

ALBERT E. REDSTONE, Assistant Forest Ranger, from Sierra National Forest (North) to Sierra National Forest (South), California.

D. G. KINNEY, promoted to Supervisor and transferred from Lewis and Clark National Forest (South) to Kootenai National Forest, Montana.

ROBERT J. MOORE, Acting Forest Supervisor, from Big Belt and Elkhorn National forests to Big Hole National Forest, Montana.

R. F. HAMMATT, Forest Assistant, from Cascade National Forest (South) to Fremont and Goose Lake National forests, Oregon.

DORR SKEELS, Forest Assistant, from Gallatin National Forest, Montana, to Coeur d'Alene National Forest, Idaho.

RAY MURRAY, Assistant Forest Ranger, from Sierra National Forest (North), California, to Sierra National Forest (South), California.

GEORGE A. BONEBRAKE, Assistant Forest Ranger, from Goose Lake National Forest to Ashland National Forest.

ALBERT B. WALKER, Assistant Forest Ranger, from Medicine Bow National Forest, Wyoming, to Sierra Madre National Forest, Wyoming.

ERNEST BRITTON, Assistant Forest Ranger, from Sierra National Forest (North), California, to Stony Creek National Forest, California.

WILLIAM F. BINGHAM, Deputy Forest Ranger, from Lincoln National Forest, New Mexico, to Gallinas National Forest, New Mexico.

W. W. CLARK, Forest Inspector, from Inspection to Acting Supervisor, Bear River National Forest, Idaho.

OLUF NEILSON, Assistant Forest Ranger, from Fish Lake National Forest, to Glenwood National Forest, Utah.

C. K. WYMAN, Deputy Forest Supervisor, from Hell Gate National Forest to Big Hole National Forest, Montana.

JOHN E. ALVERSON, Assistant Forest Ranger, from San Bernardino National Forest to Pinnacles National Forest, California.

FURLOUGHED.**Forest Management—**

P. T. COOLIDGE.

Reserve Organization—

RALPH W. GORDON, Assistant Forest Ranger, Black Hills National Forest, South Dakota.

JOHN R. HUGHES, Assistant Forest Ranger, Battlement Mesa National Forest, Colorado.

P. T. COOLIDGE, Forest Assistant, Bighorn National Forest, Wyoming.

CLYDE R. SEITZ, Deputy Forest Supervisor, Blue Mountains National Forest (East) Oregon.

THOMAS N. REYNOLDS, Assistant Forest Ranger, Pecos River National Forest, New Mexico.

J. G. STANCHFIELD, Assistant Forest Ranger, San Gabriel National Forest, California.

FURLOUGH CANCELED.

Reserve Organization—

WILLIAM H. HOTTELLING, Assistant Forest Ranger, Klamath National Forest, California.

TITLE CHANGED.

Reserve Organization—

T. D. WOODBURY, from Forest Assistant to Assistant Forest Inspector.

RESIGNED.

Office of the Forester—

PROF. HENRY S. GRAVES, Collaborator.

Law—

G. W. WOODRUFF, Expert.

Forest Extension—

J. F. BOND, Forest Assistant.

Reserve Organization—

WILLIAM S. CALEY, Deputy Forest Ranger, San Bernardino National Forest, California.

GEORGE F. CAMPBELL, Deputy Forest Supervisor, San Francisco Mountains National Forest, Arizona.

GEORGE A. VILES, Assistant Forest Ranger, Pecos River National Forest, New Mexico.

CHARLES E. BUCHANAN, Deputy Forest Ranger, Yellowstone National Forest (Absoraka Division), Montana.

R. W. SHELLABARGER, Supervisor, Cochetopa National Forest, Colorado.

HENRY E. MILLER, Assistant Forest Ranger, Yellowstone National Forest (Shoshone Division), Wyoming.

JOSEPH P. WILSON, Deputy Forest Ranger, San Francisco Mountains National Forest, Arizona.

S. S. TERRELL, Forest Supervisor, Blue Mountains National Forest (East), Oregon.

EDGAR PARKER, Forest Guard, Lincoln National Forest, New Mexico.

W. H. PEARCE, Supervisor, Yellowstone National Forest (Shoshone Division), Wyoming.

LOUIS BUSER, Deputy Forest Ranger, Pikes Peak National Forest, Colorado.

JOHN F. HILT, Assistant Forest Ranger, Sawtooth National Forest, Idaho.

SEPARATED.

Reserve Organization—

R. D. HALE, Forest Guard, Tonto National Forest.

CHARLES REEDY, Forest Guard, Tonto National Forest.

A. M. NEAL, Forest Guard, Wichita National Forest.

W. S. PADDOCK, Forest Guard, Weiser National Forest.

DISMISSED FROM THE SERVICE.

Reserve Organization—

C. E. SMITH, Forest Guard, Cascade National Forest (North), Oregon.

SERVICE NOTES FOR APRIL, 1907.

OFFICE OF LAW.

Mr. GEO. W. WOODRUFF, formerly in charge of this Office, has resigned to accept the position of Assistant Attorney-General assigned to the Department of the Interior. His successor is Mr. PHILIP P. WELLS, formerly in charge of the Section Trespass.

Legislation—

The following portions of the agricultural appropriation act for the fiscal year ending June 30, 1907 (Public, 242) contain new provisions affecting the Forest Service:

Salaries, Forest Service: One forester, who shall be chief of Bureau, five thousand dollars. * * * Forest reserves, * * * shall be known hereafter as national forests. * * * The Secretary of Agriculture may * * * transport and care for fish and game supplied to stock the national forests or the waters therein, * * * purchase * * * technical books and technical journals for officers of the Forest Service stationed outside of Washington. * * * Total for salaries and general expenses, Forest Service, one million nine hundred thousand dollars.

And there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, the sum of five hundred thousand dollars, to be expended as the Secretary of Agriculture may direct for the proper and economical administration, protection, and development of the national forests, one hundred and twenty-five thousand dollars of which amount is to be immediately available: *Provided*, That hereafter on or before the first day of January of each year the Secretary of Agriculture shall submit to Congress classified and detailed reports of all receipts by the Forest Service and classified and detailed estimates of all expenditures intended for this service for the next fiscal year and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year: *Provided further*, That all money received after July first, nineteen hundred and seven, by or on account of the Forest Service for timber, or from any other source of forest reservation revenue, shall be covered into the Treasury of the United States as a miscellaneous receipt and there is hereby appropriated and made available as the Secretary of Agriculture may direct, out of any funds in the Treasury not otherwise appropriated, so much as may be necessary to make refunds to depositors of money heretofore or hereafter deposited by them to secure the purchase price on the sale of any products or for the use of any land or resources of the national forests in excess of amounts found actually due from them to the United States: *And provided further*, That ten per centum of all money received from each forest reserve during any fiscal year, including the year ending June thirtieth, nineteen hundred and six, shall be paid at the end thereof by the Secretary of the Treasury to the State or Territory in which said reserve is situated, to be expended as the State or Territorial legislature may prescribe for the benefit of the public schools and public roads of the county or counties in which the forest reserve is situated: *Provided further*, That when any forest reserve is in more than one State or Territory or county the distributive share to each from the proceeds of said reserve shall be proportional to its area therein: *And provided further*, That there shall not be paid to any State or Territory for any county an amount equal to more than forty per centum of the total income of such county from all other sources: *Provided further*, That hereafter no forest reserve shall be created, nor shall any additions be made to one heretofore created within the limits of the States of Oregon, Washington, Idaho, Montana, Colorado, or Wyoming, except by act of Congress.

Total for Forest Service, two million four hundred thousand dollars. * * *

* * * The maximum salary of any classified scientific investigator in the city of Washington, or other employee engaged in scientific work, shall not exceed three thousand five hundred dollars per annum. * * *

Survey of and report on Appalachian and White Mountain watersheds: To enable the Secretary of Agriculture to examine, survey, and ascertain the natural conditions of the watersheds at and near the sources of the various rivers having their sources in the Southern Appalachian Mountains and the White Mountains, and to report to Congress

the area and natural conditions of said watersheds, the price at which the same can be purchased by the Government, and the advisability of the Government purchasing and setting apart the same as national forest reserves for the purpose of conserving and regulating the water supply and flow of said streams in the interest of agriculture, water power, and navigation, twenty-five thousand dollars, to be immediately available. * * *

That hereafter on or before the first day of January of each year the Secretary of Agriculture shall submit to Congress, in addition to the estimates now required by law, classified and detailed estimates of every subject of expenditure intended for the Agricultural Department for the next fiscal year, and detailed reports of all expenditures under any appropriation for such service during the preceding fiscal year. * * *

Approved, March 4, 1907, 9.43 a. m.

To compensate for the loss of the forest reserve special fund the act increases the appropriation for salaries and general expenses \$1,000,000 over the \$900,000 estimated for. There will also be available during the next fiscal year the balance of the special fund on hand June 30, 1907, which is estimated at \$600,000, so that the total for operating expenses on the National Forests will be \$2,500,000. The appropriation of \$500,000 for permanent improvements is additional to this.

The following provisions of the bill as reported by the House Committee on Agriculture failed of enactment:

That the Secretary of Agriculture may fix the names, and designate the boundaries of National Forests after they have been reserved; that moneys may be received from cooperators and expended in the protection and improvement of the National Forests; that the Forester may procure an official seal for the authentication of the records of the Forest Service.

Amendments were proposed to prohibit charges for grazing and for the conservation and use of water in the National Forests, but after careful consideration they were not adopted.

The following amendment to place the unreserved public range under the administration of the Forest Service was reported by the Senate Committee but failed to pass:

And hereafter, for the purpose of restoring, protecting, and increasing the grazing value of the public domain and promoting the agricultural use thereof, the Secretary of Agriculture may organize grazing districts and regulate and control grazing upon the unappropriated unreserved lands of the United States, under such rules and regulations as he may prescribe, may issue permits or grant leases for periods not exceeding ten years, and charge and collect reasonable fees for grazing thereon, the receipts to be deposited in the Treasury of the United States to the credit of the special fund obtained from charges for timber, grazing, and other resources of the national forests and provided for by section five of the act of February first, nineteen hundred and five (volume thirty-three of the Statutes at Large, page twenty-eight), which is hereby appropriated and made available, in addition to its present uses and under the restrictions provided by law for the regulation, restoration, protection, and increase of grazing upon the public lands and for the employment of necessary assistants for such purposes in the city of Washington and elsewhere; and it shall be unlawful after January first, nineteen hundred and eight, to graze any live stock upon any organized grazing district otherwise than as the said rules and regulations shall prescribe: *Provided*, That all leases or permits to graze issued under this provision shall be subject to the right of homestead or other settlement, location, entry, patent, or any other disposal of public lands under the public-land laws, and any appropriation so made shall operate as a cancellation of said lease or permit as to the land so appropriated: *Provided further*, That bona fide homestead settlers or residents shall be permitted to graze free of charge their stock used for necessary domestic purposes on the public lands affected hereby: *And provided also*, That preference shall be given

to bona fide homesteaders and settlers in the allotment of an equitable proportion of range adjacent to their homes not later than the beginning of the next annual grazing period: *And provided further*, That all of the receipts from the grazing fees herein authorized in excess of the cost of administration, protection, and improvement of the public range and necessary working capital for the ensuing fiscal year shall be paid to the States and Territories in which said fees originate at the close of each fiscal year, to be used for schools, roads, irrigation, or other public purpose as the respective legislatures may prescribe, the distribution of such residue to be proportional to the receipts from said grazing fees from the respective States and Territories during the preceding fiscal year; but nothing herein shall be construed to prevent the payment of ten per centum of receipts from national forests to the States and Territories, as now provided by law.

The criminal appeals act (Public 223) is as follows:

AN ACT Providing for writs of error in certain instances in criminal cases.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That a writ of error may be taken by and on behalf of the United States from the district or circuit courts direct to the Supreme Court of the United States in all criminal cases, in the following instances, to wit:

From a decision or judgment quashing, setting aside, or sustaining a demurrer to, any indictment, or any count thereof, where such decision or judgment is based upon the invalidity, or construction of the statute upon which the indictment is founded.

From a decision arresting a judgment of conviction for insufficiency of the indictment, where such decision is based upon the invalidity or construction of the statute upon which the indictment is founded.

From the decision or judgment sustaining a special plea in bar, when the defendant has not been put in jeopardy.

The writ of error in all such cases shall be taken within thirty days after the decision or judgment has been rendered, and shall be diligently prosecuted, and shall have precedence over all other cases.

Pending the prosecution and determination of the writ of error in the foregoing instances, the defendant shall be admitted to bail on his own recognizance: *Provided*, That no writ of error shall be taken by or allowed the United States in any case where there has been a verdict in favor of the defendant.

Approved, March 2, 1907.

The city of Durango, Colo., received a grant, for municipal water supply purposes, of land within the San Juan National Forest, by an act approved March 1, 1907. (Public 157.) A similar grant of lands within the Medicine Bow National Forest was made to the city of Boulder, Colo., by an act approved March 2, 1907. (Public 185.)

The sundry civil appropriation act of March 4, 1907 (Public 253), provides the usual sum of \$100,000 for continuing the survey of the National Forests.

An amendment, approved February 8, 1907 (Public 72), of the Agricultural settlement act of June 11, 1906, removes the restrictions upon the operation of the act in the following townships in Pennington County, S. Dak., within the Black Hills National Forest: 1 N. 1 E.; 2 N. 1 E.; 1 N. 2 E.; 2 N. 2 E.; 1 S. 1 E.; 2 S. 1 E.; 1 S. 2 E.; 2 S. 2 E., Black Hills Meridian.

The Appalachian and White Mountain forest reserves bill failed to pass.

Trespass—

It now seems probable that it will not be possible to take advantage of the criminal appeal act in deciding the constitutionality of the act of June 4, 1897, and the regulations made under its authority, until at least the next session of the Supreme Court. The cases which promised to give the Government a chance to decide the question finally by immediate appeal have either been postponed or decided against the accused. In the northern district of California the case of *United States v. Thomas Deguirre et al.* (grazing trespass) was decided, upon motion in arrest of judgment, against the defendant by Judge De Haven, who had formerly decided against the constitutionality of this law and the validity of the Secretary's regulations. In Idaho Judge Beatty decided the case of *United States v. Domingo* in the same way. Thus the constitutionality of the statute has been upheld by the courts in Arizona, Idaho, and northern California. There are three districts in which the constitutionality of the act has been denied: Southern California, Utah, and eastern Washington. Violations of the Secretary's regulation will be prosecuted in these districts and if any decision is adverse the case will be appealed immediately to the Supreme Court.

On March 18 the Hon. William H. Hunt, United States district judge for Montana, made permanent an injunction which was first granted on April 10, 1905, against Thomas Shannon. Shannon was enjoined from allowing his cattle to drift upon the Little Belt National Forest. In an exhaustive opinion Judge Hunt decides that article 4, section 3, of the Constitution gives Congress legislative power over the public lands; that the statute ("The Use Book," p. 158) authorizing the Secretary of the Interior to make rules and regulations for the protection and use of the national forests, is a valid exercise of that power, and that the statute and regulations must, as to national forests, prevail over the general policy of the State of Montana voiced through its laws, which gives no legal remedy for the damage done by animals running at large on the public domain to unfenced private lands.

In the saloon trespass cases of Lyman A. Plumley and Orenshaw and Moffett, on the Alexander Archipelago National Forest, a mandatory injunction was issued against the trespassers to remove their buildings. Motion to quash was denied, and the final hearing will probably be held in April.

The cases which were pending for trespass committed on the Portales National Forest have been referred to the General Land Office.

The following cases have been closed:

Boughton, timber trespass and ejectment, Yellowstone National Forest (Shoshone Division); Sherwin, privilege trespass, Sierra National Forest (North); Saginaw and Manistee Lumber Company, privilege trespass, San Francisco Mountains National Forest; Norell, grazing trespass, Park Range National Forest; Whittemore Land and Live Stock Company, privilege trespass (fence), Modoc National Forest; Scorup, grazing trespass, Fish Lake National Forest; Bean, privilege trespass, Chiricahua National Forest; William McMichael, grazing trespass, Prescott National Forest; George Gould and Ray Patterson, fire trespass, Lewis and Clark National Forest; Magleby, grazing trespass, Fish Lake National Forest; Carr, grazing trespass, Wichita National Forest; Augustus La Fond, privilege trespass, Yellowstone National Forest (South); Edwin Culver, fire trespass, Stanislaus National Forest.

Privileges—

The following right of way cases, referred from the Department of the Interior to the Forester for report as to whether the projects would interfere with National Forest interests, were returned to that Department between February 15 and March 15 with favorable reports by the Forester:

Edward Gillette—Reservoir—Big Horn National Forest, Wyoming; Pacific and Idaho Northern Railway Company—Railroad—Weiser National Forest, Idaho; part of North Coast Railroad—Rainier National Forest, Washington; San Luis Valley Reservoir Company—Reservoir—San Juan National Forest, Colorado.

The following important special-privilege permit was issued by the Forester on March 15:

Loren B. Curtis—Reservoir—Park Range National Forest, Colorado.

OFFICE OF FOREST MANAGEMENT.

Silvical Notes—

The silvical notes for the trees listed in the February Field Program are not for permanent distribution. Until leaflets can be printed forest officers will confer a favor by returning as promptly as possible such notes as have been loaned them, so that others who desire to use them may do so.

Return to Breastheight in Measurements—

It has been decided to return to the height of 4½ feet from the ground as the breast-high point in the measurement of the diameter of trees within the National Forests. The height of 3 feet from the ground has been found unsatisfactory in actual practice. It is rather too low for convenient measurement with calipers. In many large trees it is low enough to include a part of the root swelling, thus tending to make unreliable the volume and growth tables which are based upon the D. B. H. measurement. Nearly all of the volume and growth tables which have been prepared by the Forest Service are based upon measurements at a point 4½ feet from the ground, and this modification will allow their use without change. Officers in charge of National Forests should see that all estimates in the future are based upon diameter measurements at 4½ feet.

Beetles Damaging Lodgepole Pine—

Dr. A. D. Hopkins, in charge of Forest Insect Investigation, Bureau of Entomology, has identified the beetle which has been damaging the lodgepole pine over large areas in the Wallowa National Forest, Oregon, as "*Dendroctonus monticola*," a species which Doctor Hopkins has found to be a very destructive enemy also of silver pine, sugar pine, and western yellow pine in various sections from northern Idaho to the Yosemite National Park. In order to bring the beetle under control, Doctor Hopkins has made the following recommendations:

At least 75 per cent of the insects in the infested trees should be destroyed during the period between the middle of October and the middle of the following June. This may be accomplished by simply removing the infested bark from the trunks of the trees as they stand or after felling, or by felling the trees and converting the infested part of the trunk into ties or sawlogs and removing them from the forest before the broods emerge. The more radical measures of scorching the bark on the logs sufficiently to kill the beetles, or as a last resort, where practically all of the trees are infested in a given locality, by starting a forest fire, are, for the present, not recommended for fear of adding to the difficulty of protecting large areas of healthy trees.

Dendroctonus Englemanni in Lincoln Forest—

It is reported that approximately 1,000 acres of spruce at the headwaters of the South Fork of Rio Bonita, in the Lincoln National Forest, New Mexico, is suffering seriously from an attack of the bark-boring beetle, *Dendroctonus englemanni*. The supervisor has been requested to take up the matter of the disposition of this timber immediately, and a strong effort will be made to negotiate a sale of all the infested timber.

OFFICE OF DENDROLOGY.

[NOTE.—Except when otherwise stated, it is to be understood that observers whose names are given in these notes are members of the Forest Service.]

Knobcone Pine (Pinus attenuata).—A considerable addition has been made recently to our knowledge of the range of knobcone pine in the northern California Coast Ranges and in the Sierras. It was known to be more or less common in the northern cross ranges, but was first observed in the Trinity Mountains in 1902 by Miss Alice Eastwood, of the California Academy of Sciences, and by R. B. Wilson in 1904 and S. J. Flinham in 1905, who found it generally distributed on the east side of the main coast range, between 2,000 and 5,000 feet elevation and extending west to Weaverville and eastward to Shasta and Whiskeytown; it was not seen, however, in the redwood belt. Southward it occurs sparingly below the pine belt at an elevation of about 3,000 feet. In 1906 Mr. Flinham noted it in the Stony Creek National Forest, between Elk Creek and Oriental, while in 1902 W. W. Mackie saw it in the same reserve on Pine and Bartlett mountains, mainly close to the yellow pine belt, at about 3,000 feet. South of the Stony Creek National Forest this pine occurs only on Mount St. Helena and Moraga Valley, where it was reported by Prof. W. S. Jepson in 1901.

In the northern Sierras, so far as now known, knobcone pine has only a local distribution. In 1899 Dr. C. Hart Merriam, Bureau of Biological Survey, reported small areas of it on the south side of Mount Shasta, where, at altitudes of about 4,000 to 5,600 feet, it is confined to slopes from Panther Creek eastward to those between branches of Mud Creek. Mr. Flinham observed it in 1905 in the lava country among yellow pines between McCloud and Bartles, whence it extends over adjoining country, often with lodgepole pine, at elevations of from 4,500 to 5,000 feet, this being the most eastern point from which it is reported. M. B. Pratt noted its occurrence in the Tahoe National Forest in the vicinity of Lynchburg mine, near the western line of the forest, at an elevation of about 4,000 feet. The most southern station now known in the Sierras is on the Merced River in T. 3 S., R. 18 and R. 19 E., where B. O. Lovelace reported it in 1906.

Singleleaf Piñon (Pinus monophylla).—This pine is abundant on the lower arid eastern slopes of the Sierras, extending northward to about central California. A single specimen, discovered by M. B. Pratt and R. W. Walker at Loyalton, Sierra County, in 1906 (lat. 39° 40'), is the northernmost station reported. There are also some considerable areas of this tree on the western foothills of the southern Sierras, but the most northern of them is some 175 miles south of Loyalton. These were discovered in 1902 by George B. Sudworth and are near the heads of the Middle and South Forks of Kings River, in Tehipiti Valley, on Bubbs and Copper Creeks, on Upper Kern River from Jordan Creek to Rock Creek, on Jordan Creek, throughout the basin of the South Fork of Kern River from Monache Valley to Cottonwood and Erskine creeks. Scattered trees were seen by Mr. Flinham in 1904 on the south end of Piute Mountains, and also a single tree on the south end of Greenhorn Mountains. Southward this piñon extends into Lower California and eastward into Utah.

California red fir (Abies magnifica).—The southern range of the California red fir in the Sierras was determined in 1905 by Geo. B. Sudworth to be the head of Fish Creek

(tributary to the South Fork of Kern River, lat. $36^{\circ} 10'$) near the crest of the range, and the heads of Deer Creek and White River, affluents of Tulare Lake (lat. $35^{\circ} 42'$) on the Greenhorn Mountains.

In northern California it was found by W. W. Mackie in 1902 on all the highest summits of the Stony Creek National Forest above 6,000 feet, on the Coast Range throughout this reserve, and on the Sanhedrin Range south to Pine Mountain. R. T. Fisher reported it as far east in the country north of Mount Shasta as the peak south of Pomeroy Creek, a tributary on the west of Butte Creek, the summit of Goose Nest, and also along the ridge east of Butte Creek.

In southern Oregon its range was extended westward from the Cascades by J. B. Leiberger in 1899 to the Umpqua-Rogue River divide and the Siskiyou Mountains, but it has not been reported from the Oregon Coast Range, nor east of the Cascade Range.

Lowland fir (*Abies grandis*).—The distribution of lowland fir in the northwestern part of Montana has been recently determined by H. B. Ayres and H. N. Whitford. It occurs in the valleys and on lower mountain slopes on the west side of the Whitefish Mountains as far north as Okonoho Creek, in the Flathead River Valley, and on the west side of the Continental Divide. On the east side of the Continental Divide, points at the head of the North Fork of Two Medicine Creek and of the North Fork of Sun River are the eastern limits, as far as known. It occurs in Flathead Lake Valley and in the Mission Mountains, while in the southern part of the Lewis and Clark National Forest it is found only on the South and Middle Forks of the Flathead River, and on the lower part of Swan River up to about Swan Peak, which, as far as now known, is the southern limit of range in Montana. The southernmost stations for this fir in Idaho are the Craig Mountains, near Lake Waha, Nez Perces County, where it was found in 1895 by Prof. J. M. Holzinger, of the Division of Botany, and the south end of the Bitterroot Mountains, where J. B. Leiberger noted it in 1899. It was also reported in 1906 by J. B. Bruins in the Henrys Lake National Forest, and in 1900 by P. A. Rydberg in the Upper Geyser basin in Yellowstone Park.

Macnab cypress (*Cupressus macnabiana*).—During January and February, 1907, J. C. La Plant reported finding four more groups of Macnab cypress in the northern part of the California Sierras. Two of these are just west of the Lassen Peak National Forest; one, consisting of two living trees and seven dead ones, at an elevation of 5,500 feet, on a plateau west of Burney Creek, in the southwest quarter section of sec. 24, T. 34 N., R. 2 E., the other, consisting of two large trees, situated near the head of the North Fork of the South Fork of Cow Creek, between 4,000 and 5,000 feet, in the southeastern quarter section of sec. 5, T. 32 N., R. 2 E. The other two groups, not yet fully investigated, are situated considerably west of the Lassen Peak National Forest, one of them being on Upper Battle Creek (near the northern line of sec. 25, T. 30 N., R. 1 W.) and the other several miles south, on Inskip Butte (T. 29 N., R. 1 W.).

Morehus oak (*Quercus morehus*).—The distribution of this little known California oak is peculiarly scattered, single individuals, or at most only a few trees, often being found at widely separated stations. Recent observations have added new groups and extended the general area of distribution. For some years the only trees known were those at Clear Lake and Sulphur Bank, Lake County, in the northern Coast Range, but in 1884 M. K. Curran observed a few trees at Newcastle, Placer County, and at Folsom, Sacramento County, while in 1889 Prof. W. L. Greene discovered scattered groups at the northern base of Mount Tamalpais and on the hills above Berkeley. In 1899 occasional thickets were found by Geo. B. Sudworth in northern Eldorado County, on a head branch of Canyon Creek (a tributary of the Middle Fork of the American River,) 2 miles northeast of Georgetown; in Amador County, near Plymouth, on the head of Indian Creek (a branch of the Cosumnes River); on the Mokelumne River, west of West Point, in Calaveras County; in Bear Creek Canyon (a branch of the Calaveras River on the west side of Bear Mountains); on the head of Murray Creek

(a tributary of the Calaveras River), 2 miles north of Mountain Ranch, and on San Domingo Creek (a branch of the South Fork of the Calaveras River), from 2 to 3 miles north of Murphy. In 1900 Mr. Sudworth also found it abundant from Cold Springs Station (Mariposa County) to the towns of Fresno Flats and North Fork (Madera County), and especially abundant in Crane Valley. In 1905 G. E. Rutherford observed it north of Yuba River (Yuba County), in a band running northwest from Red Bluff and the lower part of Dry Creek through Yuba County into Butte County. In 1907 it was observed by S. L. N. Ellis in Tuolumne County, between Sonora and the Tuolumne River, and was reported as abundant near Badger, Tulare County. F. G. Plummer reported it also in 1906 in the Santa Lucia Mountains in the Sur, Carmelo, and Arroyo Seco river basins.

Madroña (*Arbutus menziesii*).—Recent observations have extended the little known range of the madroña into the cross ranges of southern California, into new localities in the coast mountains and Sierras of California, and also into the southern Cascade Range of Oregon.

As now known in southern California, it occurs sparingly in the following localities: G. A. Coleman noted a few small trees in canyons at 400 to 500 feet on Point Piños, Monterey Bay. It was observed long ago in the Santa Lucia Mountains, but its distribution there was described definitely in 1905 by F. G. Plummer and M. G. Gowsell as along coastal summits at 800 to 4,600 feet in the basins of the Sur, Carmelo, Arroyo Seco, San Antonio, and Nacimiento rivers. In the same year Miss Eastwood, of the California Academy of Sciences, and Mr. Plummer found it in the San Luis Obispo Mountains, in the basins of the Salinas, Santa Marguerita, and San Luis rivers. As long ago as 1890, H. C. Ford, of the Santa Barbara Society of Natural History, noted it as a shrub on the north slope of the Santa Inez Range, and in 1905 it was observed by Messrs. Plummer and Gowsell to extend along the north slope of this range at 1,000 to 3,500 feet, the largest trees being near Refugio Pass. W. R. Mattoon also found several medium-sized trees in 1904, in the same general region, at the head of Rattlesnake Creek, on the Cold Spring trail, at an altitude of 2,500 feet. It was also noted by S. J. Flinham in 1905 in the San Rafael Range, but only on the western slopes of Big Pine Mountain and Mount Medulcis in the Santa Inez drainage in cool canyons at elevations of 3,000 to 4,000 feet. In the San Gabriel Mountains it was reported in 1895 by A. J. McClatchie on the Sturtevant trails in a narrow belt at an elevation of about 3,000 feet, while a small group, noted by L. Abrams, has long been known on Mount Wilson at the same altitude. The occurrence of a few shrubby plants, found by Doctor Hasse in 1900 on the Santa Monica Mountains in Los Tuñas Canyon, was reported by S. B. Parish (not of the Forest Service). In 1900 T. P. Lukens reported madroña from the San Bernardino Mountains, as did also Miss Eastwood.

In the northern coast ranges it was observed in 1904 by R. B. Wilson on the south side of the Siskiyou Mountains. The most eastern point in northern California at which madroña has been found is in the yellow pine belt of the Shasta National Forest, where E. Koch observed it. Miss Eastwood saw it in 1902 in the Trinity National Forest, extending up Canyon Creek to the first falls and eastward to a canyon near Lewiston. In the same reserve R. T. Fisher and R. B. Wilson noted it in 1904, and E. S. Mainwaring in 1906, as occurring generally from the bottoms of valleys up to over 3,000 feet. Large trees were observed near Wildwood, Trinity County, Cal., by Dr. David T. Day, of the U. S. Geological Survey. Southward, in the Stony Creek National Forest, it was observed by W. W. Mackie in 1902 as common on all tributaries of the Eel River draining the western border. Farther south on the inner coast range only isolated trees have been noted in western Solano County, where Prof. W. L. Jepson found it in 1901.

In the northern California Sierras it is now known to be common in the foothills as far north as the Plumas and Lassen Peak National Forests, where A. R. Powers

observed it in 1906. In the same year J. D. Guthrie saw it between Camptonville post-office and the Middle Fork of Yuba River. Its southern limit in the Sierras is, as far as now known, Packards Camp Stream, a branch of the South Fork of Tuolumne River, on the north slope of Pilot Ridge (latitude $37^{\circ} 45'$), where W. J. Rushing discovered a small grove in 1906.

It was observed in southern Oregon by J. B. Leiberger, in 1899, on the southern slope of the Umpqua-Rogue Divide (T. 33 S., R. 1 W. and 1-3 E.) and southward along the western slope of the Cascades to the Siskiyou Mountains, on the northern slope of which it extends eastward to the head of Bear Creek (T. 40 S., R. 2 E.). R. T. Hammett in 1906 also reported it farther north in the Cascades, on Lost Creek (T. 22 S., R. 1 E.).

The distribution of madroña in the Oregon Coast Ranges is still unknown.

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- New York Lumber Trade Journal*, March 15, 1907.—The true value of the work of the National wholesale lumber dealers' association. p. 32.
- Packages*, March, 1907.—Cost of ash lumber and staves. p. 21. The problem of cores—What is to be done with them?—Suggestions for their profitable utilization.
- Canada Lumberman and Woodworker*, March, 1907.—Sawdust briquettes. p. 23; The measurement of saw logs. p. 24; Calculating board measure. p. 31.
- Lumber Trade Journal—New Orleans*, March 15, 1907.—Steel versus wood railway ties. p. 11; End branding cypress logs. p. 12; Evolution of the Tupelo industry. p. 17.
- American Lumberman*, March 16, 1907.—A voice from the Inland Empire concerning forest reserves. p. 30.
- Wood-Worker*, March, 1907.—The way the lumber goes. p. 31; Circassian walnut. p. 35.
- Lumberman's Review*, March, 1907.—Bay poplar coming into favor. p. 24C.
- Lumber World*, March 15, 1907.—Foreign lumber measurements. p. 20.
- National Coopers' Journal*, March, 1907.—The world's timber supply. p. 17.
- American Lumberman*, March 9, 1907.—Honduras' forest wealth. p. 34; The forests of Japan and Korea. p. 34; Utilization of pine stumps. p. 34; Railroad will raise trees for cross-ties. p. 59.
- Pacific Coast Wood and Iron*, March, 1907.—Fir shingles. p. 9; Will preserve Calaveras groves. p. 19; The President on "Forest Reserves." p. 21; The utilization of wood waste by distillation. p. 27.
- Mississippi Valley Lumberman*, March 8, 1907.—Keeping high-priced Canadian lumber out. p. 19.
- American Lumberman*, March 2, 1907.—Canada's forestry policy. p. 58.
- Lumber Review*, March, 1907.—Source and extent of lumber supply. p. 49.
- Mississippi Valley Lumberman*, March 1, 1907.—Increasing use of fir lath in the east. p. 19; What forestry students know about running a camp. p. 21; Shipping ties to China. p. 33.
- West Coast Lumberman*, February, 1907.—Different kinds of coast cedar. p. 347.

OFFICE OF FOREST EXTENSION.**Experimental Planting and Sowing—**

Supervisor Torstenson has reported that the spruce, pine, and deodar seedlings, 5,000 in all, which were shipped from the Pasadena Planting Station and set out in February on suitable sites in the Monterey National Forest, are in excellent condition and in some cases have made considerable new growth. In addition to the experimental planting, 150 pounds of yellow pine seed were sown broadcast on 50 acres of burned land in order to determine whether this method will prove useful in reforesting areas of this character.

Forest Nurseries—

As a result of careful studies made during the field season of 1906, nurseries will be established in the Pecos National Forest, near Las Vegas, N. Mex., and on the Fort Stanton Military Reservation, near the Lincoln National Forest. Each nursery will be one-half acre in size, with an estimated capacity of 400,000 trees at the end of the first season. Among the important watersheds where planting is needed in this region are the San Antonio and Rio Gallinas rivers, Santa Fe Creek, and Canjilon Creek. It is

intended that the nursery at Fort Stanton supply seedlings for planting about 30,000 acres on the Lincoln National Forest. The Pecos nursery will provide stock for use in the Pecos and Jemez forests, and also serve as a distributing point to other National Forests in New Mexico.

Forest Planting Study—

In order to complete the investigation of regions of economic planting in the United States a study has been begun in Ohio, Indiana, and northern Kentucky to determine the best species for forest planting in this region. The rapid removal of the forest and the need for producing fence posts and farm material at home have caused many farmers to become interested in forest planting. This study became necessary in order to furnish them information concerning species and methods. The results will be embodied in one or more short circulars.

Seed for Rangers' Nurseries—

Seed for use in rangers' nurseries this spring has been distributed to supervisors. In a number of instances it was impossible to send the full amount of seed requested, owing to the limited supply. It is suggested that forest officers use to the very best advantage whatever quantity of seed they receive, since further requests can not be filled this year.

OFFICE OF FOREST PRODUCTS.

Forest Computation—

The well-known inaccuracy of the log rules in general use has led to the testing of the Decimal C Scribner log rule employed in scaling logs from the National Forests.

Nine hundred and seventy-five Douglas fir logs from 6 to 30 inches in diameter (averaging about 15 inches) were scaled by the Decimal C Scribner rule, without any allowance for defects, and then followed through the mill. They were sawed by a one-fourth inch circular saw and the product consisted of varied material, such as 1-inch and 2-inch stuff and railroad ties.

The saw cut overran the log scale 22 per cent on a total Decimal C Scribner scale of 121,000 board feet. For no size of log did the saw cut underrun the log scale. The overrun varied from about 70 per cent for logs less than 10 inches in diameter at the small end to 5 per cent for logs over 25 inches in diameter.

The taper of these logs and the procuring of ties and short boards from them makes their mill overrun greater than would be the case with more cylindrical logs or logs sawed into lumber exclusively.

Test of Fire-killed Timber—

Tests recently completed at the timber-testing laboratory of the Forest Service at the University of Washington, Seattle, Wash., upon green and fire-killed white fir (*Abies concolor*) from the Pecos River National Forest in New Mexico indicate that the killing of the timber by fire is not in itself injurious, and that sound fire-killed timber should simply be considered thoroughly seasoned timber, so far as its use is concerned. Fire-killed timber checks badly, however, when left in the tree, and this is an obstacle in the way of utilizing it for some purposes. For the manufacture of lumber it should be used, if possible, within a year after it is killed, but satisfactory railroad ties have been made from timber killed fifty years previously.

The importance of determining the best means of utilizing timber of this class is shown by the fact that in the States of Colorado, Montana, Nevada, Utah, and Wyoming alone it is estimated that nearly one billion feet of dead timber is found in the National Forests.

Effects of Knots and Defects on Strength.

Tests to determine the effect of knots and other defects upon the strength of Douglas fir bridge stringers have just been completed and summarized at the Service timber-testing station at the University of Oregon. They show that the best grade of Douglas fir is practically as strong and stiff as longleaf pine, which in the past has been the standard timber for structural purposes; also, that stringers with knots near the middle half of the bottom face have 77 per cent of the strength and 85 per cent of the stiffness of clear stringers, while stringers with knots in any other place have 90 per cent of the strength and 92 per cent of the stiffness of clear timber, or, in other words, that knots near the bottom face of a beam have a greater weakening effect than knots near the top face. This summary brings out other interesting facts about the influence of rate of growth and of the per cent of summer wood and about relative value of different grades of Douglas fir.

Computing Volume of Poles—

In the pole-seasoning experiments of the Forest Service measurements of circumference were made every 5 feet throughout the length of each pole in order that its cubic contents could be accurately calculated. These measurements involve such an expenditure of time and effort as to be impractical for pole handlers, so it was thought that a circumference at the center of gravity might give equally exact results.

The data worked up for chestnut prove that for that species a circumference measurement at the center of gravity will give the same volume for a pole as circumferences measured every 5 feet.

Preservative Treatment of Poles—

About the first of April a series of experiments will be taken up at Parkton, Md., on chestnut telephone poles. The butts of some of the poles will be treated with creosote by the open-tank method; others will be painted with hot creosote and carbolineum, while the remainder will be allowed to remain untreated to serve as a basis for comparison. Later on all the poles will be set in an experimental line, where the practical value of each method of treatment can be determined.

All the seasoning data on these poles have been obtained, and the report has been practically completed. Among other points, it has been proved that to season poles before being shipped to their destination for setting not only renders the wood stronger and more durable, but effects a saving in freight that greatly exceeds the interest on the value of the poles during the seasoning period.

OFFICE OF RECORD.

New Form 99 for Supervisors' Accounts—

A revision of Form 99 will soon be issued containing the following headings in place of those now on the form: (1) Administration, salaries; (2) administration, expenses; (3) travel; (4) rent; (5) forest planting; (6) headquarters; (7) telephone lines; (8) drift fences and corrals; (9) roads, trails, bridges; (10) fire lines; (11) equipment; (12) fire.

By this revision the scope of the form is broadened. All salaries, as well as expense accounts, are to be included with a view of securing data for a more complete record of expenditures for the improvement and development of the National Forests.

This form properly prepared furnishes a basis for a very important record in the office of the Forester, and care should be exercised by all supervisors that the form is attached to all accounts submitted, including pay rolls, and that the distribution of each voucher is correctly made.

Reimbursement accounts will not be paid unless accompanied by the form.

Hereafter supervisors should substitute the above headings on the present Form 99 submitted with accounts until such time as a supply of the revised forms is received. The superseded forms on hand should then be destroyed.

Form 99 to be Included in Expense Accounts—

The attention of supervisors is again called to the fact that Form 99 is frequently omitted from accounts forwarded to the special fiscal agent for payment. The omission of this form means that settlement must be withheld until its receipt from the supervisor.

The cost-keeping system by projects demands that every item disbursed should be chargeable to a specific project. Failure on the part of the supervisor to cooperate in carrying out this system by following the instructions in the Use Book and Service Orders will be regarded as a neglect of duty, since it destroys the efficiency of the system.

Whenever payment to temporary employees is made on pay rolls (Form 143) the Form 99, covering the accounts of such temporary employees, should accompany the roll.

This office is striving to make prompt payments, and unless members of the Service prepare and present accounts accompanied by the necessary forms in accordance with the regulations and instructions, delay in payments will result.

Supplies—

Many requisitions were received during March for supplies required by forest officers for the ensuing six months. Embarrassment has resulted, however, from the failure of forest officers to comply with the regulation printed on page 111 of "The Use Book" that requisitions for articles needed for immediate use at the time the semiannual requisition is made be marked "Special." In order to avoid delay, it is imperative that this regulation be followed strictly.

Photographic Laboratory—

Members of the Service are requested to limit their requisitions for photographic films to the quantity needed for use within the ensuing three months. Films are subject to deterioration, and they can not be reissued after the indicated time of expiration. The loss suffered by the Service from the return of films ordered in excess of actual needs would be avoided if requisitions were made for smaller quantities at shorter intervals.

Mail—

On page 133 of "The Use Book" is printed a regulation that the initial in the upper left-hand corner of the letter answered must be given in the opening sentence of the reply. A more general observance of this rule by forest officers will result in greater promptness in the distribution of mail in the Forest Service. The Mail Clerk is frequently unable to determine from the contents of a letter the office to which it should be referred.

OFFICE OF GRAZING.

In the National Forests, which have been created since March 1, no charge will be made for grazing this year, and all stock which has regularly used the range will be admitted without permit for the coming season. If it is found that any of these ranges are being injured by overgrazing, the number of stock allowed will be reduced gradually from year to year until the damage is stopped. The cooperation of the stockmen will be welcome in the adjustment of range matters, and every effort will be made to regulate grazing in a way which will secure a better and more permanent use of the ranges. The periods during which grazing is allowed will be fixed to meet the local needs so far as possible, and the division of the range between cattle and sheep, when necessary, will be governed by both its past use and its adaptability for grazing the kind of stock to be allowed upon it. Settlers living either within or near the National Forests will be given a preference in the allotment of range adjacent to their homes, and small owners will be protected in the use of such range as is needed for their stock.

One of the most important laws passed at the last session of Congress was that in reference to criminal appeal. The Government is now able to carry directly to the Supreme Court any criminal case decided against it when the ground of the decision is the invalidity or construction of the statute upon which the indictment is founded. This, for the first time, puts it in the power of the Forester to secure from the Supreme Court a decision upon the validity of the criminal provisions of the act authorizing the Secretary of Agriculture to make rules and regulations for the administration of the national forests. In all cases of criminal trespass the forest officers will report the facts to the Forester, who will instruct them in reference to the action to be taken, but arrests may be made without waiting for instructions in cases where persons are caught in the act of driving unpermitted stock upon a national forest.

In some localities there appears to be a misunderstanding in reference to the stock which is exempt from grazing fees. The six head of milch cows or work animals which are allowed to graze without permit must be stock in actual use by a settler residing either within or near a National Forest. Milch cows or work animals which are turned out to be grazed on the range the same as other stock during the regular period and which are not in ordinary use do not fall within the rule and the grazing fee must be paid upon them. All saddle, pack, and work animals used in caring for stock grazed under permit are exempt from grazing fees.

OFFICE OF NATIONAL FOREST ORGANIZATION.

Compilation—

Up to March 15, 1,412 ranger stations had been established, 1,129 of which were withdrawn previous to January 1, 1907.

Compass Surveys, etc.—

Part IV of National Forest Order No. 23 is in course of preparation. This order gives detailed instructions for compass surveys, the erection and marking of monuments, and the preparation of plats and survey descriptions, in order to eliminate past errors as far as possible and systematize the work of withdrawing ranger stations

from entry. It cancels all previous conflicting instructions, but the main changes brought about by it are in the line of increased attention and detail, so as to facilitate the office work and insure the validity and accuracy of the withdrawals. The new order will be issued at once in the form of a thin notebook of convenient pocket size.

Requisitions—

No requisitions, unless they be for gift photographs, should be made in the name of the technical assistant or any employee definitely assigned to National Forest or permanent station. The supervisor or acting supervisor will be charged with responsibility for all articles in use on his reserve or station, and must take immediate steps to have all property now in the possession of employees transferred to him, reporting the transfer to the Forester on forms 939, executed in accordance with instructions printed thereon. Receipts on temporary transfer form No. 943 should then be procured from the employees and retained by the supervisor or acting supervisor.

Form 820—

Paragraph 20 recently added to form 820 is not fully understood by the supervisors. It is intended that if a case is ready for closing, a negative answer under this paragraph is sufficient information for the Service to allow the closure of the case, and a separate letter recommending that the case be closed is unnecessary.

Form 111—

Form 111 (Ranger Stations) has several times been requisitioned by supervisors. This is a small card form intended for use only by the Ranger Station desk of the Service and is in no way suited for use by field men or National Forest headquarters.

Sawmill Permits—

Forest officers should be careful to include in applications for a sawmill permit a statement of whether the mill will be situated at more than one place on the area of a sale. A clause in regard to this inserted in the contract may save making a new contract or obtaining the consent of the sureties in case the mill has to be moved.

Signs for Offices—

In accordance with Service Order No. 129, the signs designating the offices of the Forest Service should be changed to read "National Forest" instead of "Forest Reserves" in the following fashion:

"Office of Black Hills National Forest."

Each office should have a sign. The style best suited will be left entirely to the judgment of the officer in charge. This expense will be chargeable to equipment.

Hereafter, Service Orders and National Forest Orders will be published in the Field Program, and will not be mimeographed and sent out during the month except in cases of special urgency.

SERVICE ORDERS.

SERVICE ORDER NO. 128.

MARCH 31, 1907.

Inspection Reports.

Hereafter every inspection report will be delivered directly to the Forester on receipt in Washington, and will be read by him, or, in his absence, by the Associate Forester, before it is sent to the Office concerned for information. No action will be taken upon an inspection report except by the Forester, or, in his absence, by the Associate Forester. This puts the control and use of all branches of inspection directly under the Forester, where they properly belong and where they will remain.

GIFFORD PINCHOT, *Forester.*

SERVICE ORDER NO. 129.

(Superseding Service Order No. 126.)

MARCH 31, 1907.

National Forests.

The agricultural appropriation act approved March, 1907, provides that the forest reserves shall hereafter be known as the "National Forests." In all references to them "National Forests" will be used instead of "forest reserve." For example, the "Black Hills Forest Reserve" is now the "Black Hills National Forest."

As rapidly as circumstances permit, the printed form in which the word "reserve" appears will be revised. In the meantime the current forms will continue in use.

In correspondence "Forest" and "Forests," when used as equivalent to "reserve" and "reserves," will always be capitalized.

By order of the Forester:

JAMES B. ADAMS, *Chief.*

NATIONAL FOREST ORDERS.

NATIONAL FOREST ORDER NO. 30.

Additional Information Required in First Letter of Transmittal in Class A and B Timber Sales.

MARCH 31, 1907.

To Forest Officers in Charge:

Hereafter in making out the first duplicate letter of transmittal in Class A and B timber sales, forest officers should give, in addition to the information required by The Use Book (pp. 38 to 39), the length of time allowed by contract for the cutting and removal of the timber.

GIFFORD PINCHOT, *Forester.*

NATIONAL FOREST ORDER NO. 31.

Trespass Reports.

MARCH 31, 1907.

To Forest Officers in Charge:

Whenever a case assumes the character of a trespass, a report in detail should immediately be made out on Form 856 and forwarded to the Forester, no matter what the previous aspects of the case have been or what correspondence has taken place concerning it. If the trespass is on a claim, report upon the claim should also be made on Form 654 or 655. If reports are made on both trespass and claim forms, cross reference should be made in each form to the other report.

GIFFORD PINCHOT, *Forester.*

NATIONAL FOREST ORDER NO. 32.

National Forest Administration Water Rights.

MARCH 31, 1907.

To Forest Officers in Charge:

A record of each actual diversion of water for use in the administration of a National Forest should be made and kept on file in the office of the supervisor. The record should consist of a statement showing the date on which the diversion was made, the method of diversion, the use to which the water is put, the description of the place of diversion, showing the name of the stream and the subdivision of land if surveyed, or if not surveyed, the description of the land by reference to natural objects or durable monuments. The statement should also show the amount of water taken, in cubic feet or inches per second. This statement should be prepared in duplicate, and both original and duplicate should be dated and signed by the forest officer making the diversion and be witnessed by any persons present with or assisting him. Both should be approved by the supervisor and the original forwarded to the Forester.

It is not necessary for forest officers to record such notices on the county records.

GIFFORD PINCHOT, *Forester.*

Issued May 1, 1907.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR MAY, 1907.

The program of fieldwork and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.
OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.
A. C. SHAW, Principal Examiner.
HERBERT A. SMITH, Editor.
GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District No. 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, District Inspector, Missoula, Mont.
P. G. REDINGTON, Forest Inspector, Washington, D. C.
F. A. SILCOX, Forest Inspector, Thompson Falls, Mont.
GEO. H. CECIL, Forest Inspector, Missoula, Mont.
C. H. ADAMS, Grazing Inspector, Missoula, Mont.

Inspection District No. 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, and Kansas.

SMITH RILEY, District Inspector, Denver, Colo.

L. F. KNEIPP, Forest Inspector, Washington, D. C.

R. P. IMES, Forest Inspector, Deadwood, S. Dak.

T. D. WOODBURY, Forest Inspector, Denver, Colo.

Inspection District No. 3.—Arizona, New Mexico, and Oklahoma. (To be organized May 15.)

D. D. BRONSON, District Inspector, Albuquerque, N. Mex.

T. S. WOOLSEY, Jr., Forest Inspector, Albuquerque, N. Mex.

W. R. MATTOON, Planting Inspector, Fort Bayard, N. Mex.

J. K. CAMPBELL, Grazing Inspector, Washington.

Inspection District No. 4.—Utah, Southern Idaho, Western Wyoming, and Eastern Nevada. (To be organized May 15.)

R. E. BENEDICT, District Inspector, Salt Lake City, Utah.

F. W. REED, Forest Inspector, Salt Lake City, Utah.

J. M. FETHEROLF, Planting Inspector, Salt Lake City, Utah.

W. C. CLOS, Grazing Inspector, Salt Lake City, Utah.

Inspection District No. 5.—California and Western Nevada. (To be organized May 15.)

F. E. OLMSTED, District Inspector, San Francisco, Cal.

COERT DU BOIS, Forest Inspector, Tucson, Ariz.

J. H. HATTON, Forest Inspector, Albuquerque, N. Mex.

WM. C. HODGE, Jr., Forest Inspector, Santa Fe, N. Mex.

G. W. PEAVY, Planting Inspector, Santa Barbara, Cal.

Inspection District No. 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, District Inspector, Tacoma, Wash.

M. L. ERICKSON, Forest Inspector, Lakeview, Oreg.

W. H. B. KENT, Forest Inspector, Tacoma, Wash.

F. E. AMES, Forest Inspector, Tacoma, Wash.

WM. L. HALL, *Assistant Forester*, in the Office of the Forester; in charge White Mountain and Appalachian Investigation.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman*, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. COX, *Assistant Forester*, in Charge.

OFFICE OF MANAGEMENT.

E. E. CARTER, *Chief*.

W. G. WEIGLE, *Assistant Chief*.

Timber Sales, E. H. CLAPP, in Charge.

S. L. MOORE, *Forest Assistant*, Washington, D. C.

P. T. HARRIS, *Forest Assistant*, Washington, D. C.

Assignments for work on important sales under the direction of supervisors:

W. T. ANDREWS, *Assistant Lumberman*, Boise, Idaho.

J. S. BAIRD, *Assistant Lumberman*, Cass Lake, Minn.

Assignments for work on important sales under the direction of supervisors—
Continued.

M. BURNS, Assistant Lumberman, Cass Lake, Minn.
W. G. DURBIN, Agent, Quincy, Cal.
I. F. ELDREDGE, Forest Assistant, Northfork, Cal.
GEORGE P. GREGG, Assistant Lumberman, Keystone, Wyo.
C. A. GALARNEAU, Forest Assistant, Sisson, Cal.
E. M. HAMILTON, Assistant Lumberman, Deadwood, S. Dak.
G. M. HOMANS, Assistant Chief, Sumas, Wash.
J. P. HUGHES, Assistant Lumberman, Carson, Wash.
J. E. KEACH, Forest Assistant, Helena, Mont.
W. E. LA FOUNTAIN, Assistant Lumberman, Northfork, Cal.
W. R. MCKINNON, Assistant Lumberman, Cass Lake, Minn.
A. J. NORTON, Assistant Lumberman, Denver, Colo.
H. C. NEEL, Forest Assistant, Deadwood, S. Dak.
R. G. POND, Forest Student, Hot Springs, Cal.
A. B. RECKNAGEL, Forest Assistant, Flagstaff, Ariz.
G. E. SAWYER, Forest Student, Sumas, Wash.
F. X. SALZMAN, Assistant Lumberman, Cass Lake, Minn.
R. Y. STUART, Forest Assistant, Wapiti, Wyo.
W. S. UHLER, Assistant Lumberman, Cass Lake, Minn.
J. D. WARNER, Forest Assistant, Boise, Idaho.
L. L. WHITE, Forest Assistant, Weiser, Idaho.
K. W. WOODWARD, Assistant Forest Inspector, Kalispell, Mont.
I. T. WORTHLEY, Forest Assistant, Delta, Colo.

Cooperation, J. S. HOLMES, Acting in Charge.

PROJECTS.

Delaware—

Study of forest conditions in cooperation with the State—W. D. STERRETT, Washington, D. C.

Indian Territory—

Examination of proposed sale on Indian lands in cooperation with the Indian Office of the Department of the Interior—S. J. RECORD: assistants, G. P. BARD and J. S. BENEDICT, Bokhoma.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Hampshire—

Examination of woodlots and timber tracts—BENTON MACKAYE, Fitzwilliam.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Jr., Odanah.

Northeastern States—

Examination of woodlots and timber tracts—WESLEY BRADFELD, Washington, D. C.

Reconnaissance, S. J. RECORD, in Charge.

Western States—

Preliminary mill scale study of western yellow pine—L. MARGOLIN, Flagstaff, Ariz.

Forest Atlas, F. G. PLUMMER, in Charge.

OFFICE OF SILVICS.**RAPHAEL ZON, Chief.**Field Studies, **RAPHAEL ZON**, in Charge.**PROJECTS.****Colorado—**

Location and estimate of timber infested by the Black Hills beetle, the Englemann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins in charge)—**W. D. EDMONSTON**, Larkspur, Colo.

Pennsylvania and Virginia—

Study of second growth yellow poplar in Northern Virginia and Eastern Pennsylvania—**W. W. ASHE**, Washington, D. C.

Northeastern States—

Preliminary study of northeastern hardwoods—**A. T. BOISEN**, Washington, D. C.

Library, **H. E. STOCKBRIDGE**, in Charge.Compilation, **E. H. FROTHINGHAM**, in Charge.**OFFICE OF EXTENSION.****SAMUEL N. SPRING, Chief.**Planting, **L. C. MILLER**, in Charge.

Assignments for work in nursery and planting under the direction of supervisors:

A. E. OMAN, Forest Assistant, Missoula, Mont.

F. J. PHILLIPS, Forest Assistant, Capitan, N. Mex.

Reconnaissance, **W. H. VON BAYER**, in Charge.**PROJECTS.**

Study of forest planting in irrigation projects in Southern Idaho—**E. O. SIECKE**, Pocatello, Idaho.

Study of forest planting in Ohio and Indiana—**A. S. PECK**, Forest Assistant, Washington, D. C.

Cooperation, **S. B. DETWILER**, in Charge.**PROJECTS.****California—**

Experimental planting—**G. B. LULL**, Collaborator, Sacramento, Cal.

Pennsylvania—

Preliminary examination of lands of the Delaware, Lackawanna and Western Railroad Company to determine the advisability of forest planting—**S. B. DETWILER**, Washington, D. C.

Hawaii—

Experimental planting—**R. S. HOSMER**, Collaborator, Honolulu.

BRANCH OF GRAZING.**A. F. POTTER**, Assistant Forester, in Charge.**OFFICE OF CONTROL.****A. F. POTTER, Chief.**Allotment, **L. F. KNEIPP**.Adjustment, **JOHN D. LELAND**.Permits, **ANNA P. KOSCHWITZ**.

OFFICE OF DEVELOPMENT.

A. F. POTTER, Chief.

Fences, C. H. ADAMS, Missoula, Mont.

Forage, W. C. CLOS, Salt Lake City, Utah.

Water, J. K. CAMPBELL, Washington, D. C.

BRANCH OF PRODUCTS.

R. S. KELLOGG, Acting in Charge.

OFFICE OF WOOD UTILIZATION.

R. S. KELLOGG, Chief.

Computing, JOHN FOLEY.

Drafting, C. A. KOLB.

Wood Chemistry, A. L. DEAN.

Wood Uses, M. CLINE.

PROJECTS.

California—

Tests of the strength of eucalyptus wood, in cooperation with the State and the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, FREDERICK DUNLAP and CORNELIUS BARRY.

Experiments in wood preservatives—A. L. DEAN, Sheffield Scientific School, Yale University, New Haven; assistants, ERNEST BATEMAN and D. C. PARMELEE.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN and ROLF THELEN.

Massachusetts—

Studies of the value of the various woods for pulp—A. D. LITTLE, 93 Broad street, Boston, and H. S. BRISTOL, 74 Pinckney street, Boston.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene.

Washington—

Tests of western hemlock and National-forest timbers, in cooperation with the University of Washington—O. P. GOSS, University Station, Seattle; assistant, H. S. SACKETT.

Washington office, timber tests—H. S. BETTS, in charge; assistant, T. W. VENEMANN, Washington, D. C.

General Studies—

Collection of statistics of forest products for the year 1906, in cooperation with the Bureau of the Census—H. M. HALE, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of lumber prices—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—W. C. GREER, New Haven, Conn.

Study of woods used in the vehicle industry—H. B. HOLROYD, Washington, D. C.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief.

PROJECTS.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistant, O. T. SWAN.

Maryland—

Experimental treatment of chestnut telephone poles, in cooperation with the American Telephone and Telegraph Company—H. F. WEISS, Parkton; assistants, H. A. PAUL and C. J. HUMPHREY.

Montana—

The laying of an experimental track with western tamarack and Douglas fir to test the value of seasoning and treating, and various devices for reducing the mechanical wear of the rails; in cooperation with the Northern Pacific Railway Company—H. B. EASTMAN, McGowan Hotel, Plains; assistant, W. H. KEMPFER.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Virginia—

Experiments in treating loblolly pine cross arms, in cooperation with the American Telephone and Telegraph Company—W. F. SHERFESEE, Norfolk; assistant, M. C. JENSEN.

General Studies—

Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.

Study of creosote production—C. L. HILL, Washington, D. C.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief.

Articles, T. CLEVELAND, Jr.

Review, FINDLEY BURNS.

Printing, QUINCY R. CRAFT.

Distribution, BRISTOW ADAMS.

PUBLICATIONS IN APRIL.

Circular 79.—Control of Forest Fires at McCloud, California.

Circular 81.—Forest Planting in Illinois.

Circular 96.—Arbor Day.

Circular 97.—The Timber Supply of the United States.

Circular 98.—Quality and Character of Creosote in Well-Preserved Timbers.

Special Circular.—Preparation of the Forest Atlas.

Special Circular.—Directions and Specifications for Building Telephone Lines on the National Forests.

BRANCH OF OPERATION.

JAMES B. ADAMS, Assistant Forester, in Charge.

OFFICE OF ACCOUNTS.

GEORGE E. KING, Fiscal Agent and Chief.

OFFICE OF MAINTENANCE.

H. C. METCALF, Chief.

Purchase, H. C. TOWERS.

Photography, A. G. VARELA.

Record, H. C. METCALF.

OFFICE OF LANDS.

G. F. POLLOCK, Chief.

Special Uses, M. J. McVEAN.

Claims, F. L. HARVEY.

Agricultural Settlement, W. J. MANGAN.

Status, J. B. SATTERLEE.

Boundaries, A. C. RINGLAND.

R. W. AYRES, South Pasadena, Cal.

C. J. BUCK, Yreka, Cal.

J. H. CLARK, Miles, Wash.

JOHN W. FARMER, Flagstaff, Ariz.

C. W. FITZGERALD, Deadwood, S. Dak.

J. D. GUTHRIE, Weaverville, Cal.

LEE A. HARRIS, Miles, Wash.

W. C. HODGE, Santa Fe, N. Mex.

R. S. HOSMER, Honolulu, Hawaii.

PAUL D. KELLETER, Deadwood, S. Dak.

W. J. MORRILL, Denver, Colo.

STANTON G. SMITH, Flagstaff, Ariz.

H. O. STABLER, Portland, Oreg.

H. F. STUDLEY, Tacoma, Wash.

L. VON WERNSTEDT, Portland, Oreg.

OFFICE OF ENGINEERING.

W. E. HERRING, Chief.

OFFICE OF ORGANIZATION.

CHAS. S. CHAPMAN, Chief.

CLYDE LEAVITT, Assistant Chief.

NATIONAL FORESTS.

DISTRICT 1.

PAGE S. BUNKER, Forest Supervisor.

IDAHO.

Bitter Root National Forest—F. A. FENN, Forest Supervisor, Kooskia.

Coeur d'Alene National Forest—RICHARD H. RUTLEDGE, Acting Forest Supervisor, Wallace; DORR SKEELS, Forest Assistant, Wallace.

Palouse National Forest—RICHARD H. RUTLEDGE, Acting Forest Supervisor, Wallace.

Priest River National Forest—B. F. MCCONNELL, Forest Supervisor, Priest River; R. L. FROMME, Forest Assistant, Priest River.

MONTANA.

Big Belt National Forest—R. W. STUART, Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant, Helena.

Big Hole National Forest (North)—C. K. WYMAN, Acting Forest Supervisor, Dillon.

Big Hole National Forest (South)—J. B. SEELEY, Acting Forest Supervisor, Sheridan.

Bitter Root National Forest (Montana Division)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Cabinet National Forest (North)—D. G. KINNEY, Forest Supervisor, Libby.

Cabinet National Forest (South)—F. A. SILCOX, Acting Forest Supervisor, Thompsons Falls.

Crazy Mountains National Forest—E. C. RUSSELL, Forest Supervisor, Livingston.

Elkhorn National Forest—R. W. STUART, Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant, Helena.

Gallatin National Forest—DAVID CONKLING, Forest Supervisor, Bozeman.

Helena National Forest—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant, Helena.

Hell Gate National Forest (east of Bitter Root Slope)—CHARLES C. HALL, Acting Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Hell Gate National Forest (Bitter Root Slope)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Highwood Mountains National Forest—JAMES G. THAIN, Forest Supervisor, Highwood.

Kootenai National Forest—D. G. KINNEY, Forest Supervisor, Libby.

Lewis and Clark National Forest (North)—F. N. HAINES, Forest Supervisor, Kalispel.

Lewis and Clark National Forest (South)—PAGE S. BUNKER, Forest Supervisor, Kalispel.

Little Belt National Forest—IRA E. TODD, Forest Supervisor, Neihart.

Lolo National Forest—ELERS KOCH, Forest Supervisor, Missoula.

Madison National Forest—J. B. SEELY, Forest Supervisor, Sheridan.

Missoula National Forest—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant, Missoula.

Pryor Mountains National Forest—H. W. THURSTON, Acting Forest Supervisor, Cody, Wyo.

Snowy Mountains National Forest—IRA E. TODD, Forest Supervisor, Neihart.

Yellowstone National Forest (Absaroka Division)—E. C. RUSSELL, Forest Supervisor, Livingston.

WYOMING.

Big Horn National Forest—W. E. JACKSON, Forest Supervisor, Big Horn.

Yellowstone National Forest (Shoshone Division)—H. W. THURSTON, Acting Forest Supervisor, Cody.

DISTRICT 2.

THOMAS HOGAN, Forest Supervisor.

COLORADO.

Battlement Mesa National Forest—DAVID ANDERSON, Forest Supervisor, Collbran.

Cochetopa National Forest—EUGENE WILLIAMS, Forest Supervisor, Moffat.

Fruita National Forest—H. K. PORTER, Forest Supervisor, Delta.

Gunnison National Forest—WM. R. KREUTZER, Forest Supervisor, Gunnison.

Holy Cross National Forest—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; F. H. MORRILL, Forest Assistant, Glenwood Springs.

Las Animas National Forest—D. E. FITTON, Acting Supervisor, Trinidad.

Leadville National Forest—A. L. STROUP, Forest Supervisor; J. H. RAMSKILL, Forest Assistant, Leadville.

Medicine Bow National Forest (Colorado Division)—SHEP N. HUSTED, Forest Supervisor, Estes Park.

Montezuma National Forest—H. N. WHEELER, Forest Supervisor, Durango.

Ouray National Forest—H. K. PORTER, Forest Supervisor, Delta.

Park Range National Forest—F. D. WHITNEY, Acting Forest Supervisor, Kremmling.

Pikes Peak National Forest—MARK G. WOODRUFF, Forest Supervisor, Denver.
Pikes Peak Planting Station—J. F. KÜMMEL, Colorado City.

San Isabel National Forest—C. J. STAHL, Acting Forest Supervisor, Westcliffe.

San Juan National Forest—F. C. SPENCER, Forest Supervisor, Monte Vista.

Uncompahgre National Forest—H. K. PORTER, Forest Supervisor, Delta.

Wet Mountains National Forest—C. J. STAHL, Acting Forest Supervisor, Westcliffe.

White River National Forest—JAMES A. BLAIR, Forest Supervisor, Meeker.

KANSAS.

Garden City National Forest—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr.

MINNESOTA.

Minnesota National Forest—G. E. MARSHALL, Acting Forest Supervisor, Cass Lake.

MONTANA.

Ekalaka National Forest—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak.

Long Pine National Forest—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak.

NEBRASKA.

Niobrara National Forest—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey. Halsey Planting Station—WILLIAM H. MAST, assistant, LA MOREE BESLEY, Halsey.

Dismal River National Forest—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor, Halsey.

North Platte National Forest—C. A. SCOTT, Forest Supervisor, Halsey.

SOUTH DAKOTA.

Black Hills National Forest—J. F. SMITH, Forest Supervisor, Deadwood; H. J. BROWN, Forest Assistant, Deadwood.

Cave Hills National Forest—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook.

Short Pine National Forest—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook.

Slim Buttes National Forest—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook.

UTAH.

La Sal National Forest—ORRIN C. SNOW, Forest Supervisor, Moab.

Monticello National Forest—ORRIN C. SNOW, Forest Supervisor, Moab.

WYOMING.

Bear Lodge National Forest—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.

Crow Creek National Forest—J. W. NELSON, Acting Forest Supervisor; C. G. SMITH, Forest Assistant, Saratoga.

Medicine Bow National Forest—J. W. NELSON, Acting Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga.

Sierra Madre National Forest—J. W. NELSON, Acting Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant, Saratoga.

DISTRICT 3.

F. C. W. POOLER, Forest Supervisor.

ARIZONA.

Baboquivari National Forest—R. J. SELKIRK, Acting Supervisor, Tucson.

Black Mesa National Forest—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Chiricahua National Forest—C. T. MCGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant, Paradise.

Grand Canyon National Forest (South)—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Huachuca National Forest—R. A. RODGERS, Acting Forest Supervisor, Nogales.

Mount Graham National Forest—H. A. E. MARSHALL, Forest Supervisor, Safford.

Pinal Mountains National Forest—H. A. E. MARSHALL, Forest Supervisor, Safford.

Prescott National Forest—C. H. HINDERER, Acting Forest Supervisor, Prescott.

San Francisco Mountains National Forest—F. S. BREEN, Forest Supervisor, Flagstaff; T. S. WOOLSEY, Jr., Assistant Forest Inspector, Flagstaff; J. H. ALLISON, Forest Assistant, Flagstaff.

Santa Catalina National Forest—ROBERT J. SELKIRK, Acting Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant, Paradise.

Santa Rita National Forest—ROBERT J. SELKIRK, Acting Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant, Paradise.

Tonto National Forest—W. H. REED, Forest Supervisor, Roosevelt.

Tumacacori National Forest—R. A. RODGERS, Acting Forest Supervisor, Nogales.

NEW MEXICO.

Big Burro National Forest—R. C. MCCLURE, Forest Supervisor, Silver City.

Gallinas National Forest—E. W. SHAW, Acting Forest Supervisor, Capitan.

Gila National Forest—R. C. MCCLURE, Forest Supervisor, Silver City; A. O. WAHA, Forest Assistant, Silver City. Fort Bayard Planting Station—W. B. HADLEY; assistant, W. D. HAYES, Fort Bayard.

Guadalupe National Forest—J. H. KINNEY, Acting Forest Supervisor, Carlsbad.

Jemez National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe.

Lincoln National Forest—E. W. SHAW, Acting Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Capitan.

Magdalena National Forest—JOHN KERR, Forest Supervisor, Magdalena.

Manzano National Forest—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque.

Mount Taylor National Forest—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque.

Pecos National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant, Santa Fe. Los Gallinas Planting Station—S. Y. PARNAY, East Las Vegas.

Peloncillo National Forest—C. T. MCGLONE, Forest Supervisor, Paradise, Ariz.

San Mateo National Forest—JOHN KERR, Forest Supervisor, Magdalena.

Taos National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe.

OKLAHOMA.

Wichita National Forest—E. F. MORRISSEY, Forest Supervisor, Cache.

DISTRICT 4.

J. F. BRUINS, Forest Assistant.

ARIZONA.

Grand Canyon National Forest (North)—SELDEN F. HARRIS, Forest Supervisor, Fredonia; LORUM PRATT, Deputy Forest Supervisor, Fredonia.

IDAHO.

Bear River National Forest—W. W. CLARK, Acting Forest Supervisor, Logan, Utah.

Caribon National Forest—J. T. WEDEMAYER, Acting Forest Supervisor, Idaho Falls.

Cassia National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.

Henrys Lake National Forest—HOMER E. FENN, Forest Supervisor, St. Anthony.

Lemhi National Forest (North)—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City.

Lemhi National Forest (South)—GUY B. MAINS, Forest Supervisor, Mackay.

Payette National Forest—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant, Boise.

Pocatello National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.
Port Neuf National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.
Raft River National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.
Salmon River National Forest—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City.
Sawtooth National Forest—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant, Boise.
Weiser National Forest—JOHN B. LAFFERTY, Forest Supervisor, Weiser.
Yellowstone National Forest (Idaho Division)—HOMER E. FENN, Forest Supervisor, St. Anthony.

NEVADA.

Charleston National Forest—DAVID BARNETT, Acting Forest Supervisor, Las Vegas.
Independence National Forest—CLARENCE N. WOODS, Acting Forest Supervisor, Elko.
Ruby Mountains National Forest—CLARENCE N. WOODS, Acting Supervisor, Elko.

UTAH.

Aquarius National Forest—GEORGE H. BARNEY, Forest Supervisor, Escalante.
Bear River National Forest—W. W. CLARK, Acting Forest Supervisor, Logan.
Beaver National Forest—WILLIAM HURST, Forest Supervisor, Beaver.
Dixie National Forest—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George.
Fillmore National Forest—WILLIAM HURST, Forest Supervisor, Beaver.
Fish Lake National Forest—N. E. SNELL, Acting Forest Supervisor, Salina.
Glenwood National Forest—N. E. SNELL, Acting Forest Supervisor, Salina.
Grantsville National Forest—C. F. COOLEY, Forest Supervisor, Grantsville.
Manti National Forest—A. W. JENSEN, Forest Supervisor, Ephraim.
Payson National Forest—DAN S. PACK, Forest Supervisor, Payson.
Salt Lake National Forest—E. H. CLARKE, Forest Supervisor, Murray.
Sevier National Forest—TIMOTHY C. HOYT, Forest Supervisor, Parowan.
Uinta National Forest—WILLARD I. PACK, Forest Supervisor, Provo; W. JONES BOWEN, Deputy Forest Supervisor, Spanish Forks; D. S. MARSHALL, Deputy Forest Supervisor, Provo; H. F. STUDLEY, Forest Assistant, Provo.
Vernon National Forest—C. F. COOLEY, Forest Supervisor, Grantsville.
Wasatch National Forest—E. H. CLARKE, Forest Supervisor, Murray. Wasatch Planting Station—N. J. FETHEROLF, Silver Lake.

WYOMING.

Yellowstone National Forest (Teton Division)—ROBERT E. MILLER, Forest Supervisor, Jackson.
Yellowstone National Forest (Wind River Division)—ZEPH JONES, Forest Supervisor, Pinedale.

DISTRICT 5.

ALLAN R. POWERS, Forest Assistant.

CALIFORNIA.

Diamond Mountain National Forest—L. A. BARRETT, Forest Supervisor, Quincy.
Klamath National Forest—R. L. & P. J. BIGELOW, Forest Supervisor, Yreka.
Lassen Peak National Forest—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor, Quincy.
Modoc National Forest—A. H. HOGUE, Forest Supervisor, Alturas.

- Monterey National Forest**—N. O. TORSTENSON, Forest Supervisor, Salinas.
- Pinnacles National Forest**—N. O. TORSTENSON, Forest Supervisor, Salinas.
- Plumas National Forest**—L. A. BARRETT, Forest Supervisor, Quincy.
- San Bernardino National Forest**—R. H. CHARLTON, Forest Supervisor, Los Angeles.
- San Gabriel National Forest**—R. H. CHARLTON, Forest Supervisor, Los Angeles.
Pasadena Planting Station—E. C. CLIFFORD, Pasadena.
- San Jacinto National Forest**—J. R. BELL, Forest Supervisor, Hemet.
- San Luis Obispo National Forest**—E. S. MAINWARING, Forest Supervisor, San Luis Obispo.
- Santa Barbara National Forest**—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara. San Marcos Planting Station—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara.
- Shasta National Forest**—G. A. COLEMAN, Forest Supervisor, Sisson; R. C. HACKLEY, Forest Assistant, Sisson; F. E. JOY, Forest Expert, Sisson.
- Sierra National Forest (North)**—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS, Assistant Forest Inspector, Northfork.
- Sierra National Forest (South)**—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, Forest Assistant, Hot Springs, Tulare County.
- Stanislaus National Forest**—S. L. N. ELLIS, Forest Supervisor, Sonora.
- Stony Creek National Forest**—MADISON B. ELLIOTT, Forest Supervisor, Elk Creek.
- Tahoe National Forest**—JOHN C. WELLS, Acting Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant, Nevada City.
- Trabuco Canyon National Forest**—J. R. BELL, Forest Supervisor, Hemet.
- Trinity National Forest**—F. H. HAFLEY, Forest Supervisor, Weaverville.
- Warner Mountains National Forest**—A. H. HOGUE, Forest Supervisor, Alturas.

DISTRICT 6.

C. H. FLORY, Forest Assistant.

ALASKA.

- Alexander Archipelago National Forest and Afognak National Forest**—W. A. LANGILLE, Forest Supervisor, Ketchikan.

OREGON.

- Ashland National Forest**—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.
- Blue Mountains National Forest (East)**—HENRY IRELAND, Acting Forest Supervisor, Sumpter; C. R. SEITZ, Deputy Forest Supervisor, Sumpter; H. D. FOSTER, Forest Assistant, Sumpter.
- Blue Mountains National Forest (West)**—A. S. IRELAND, Forest Supervisor, Prineville.
- Bull Run National Forest**—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.
- Cascade National Forest (North)**—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant, Portland.
- Cascade National Forest (South)**—S. C. BARTRUM, Forest Supervisor, Roseburg.
- Coquille National Forest**—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.
- Tremont National Forest**—M. L. ERICKSON, Acting Forest Supervisor, Lakeview; R. F. HAMMATT, Forest Assistant, Lakeview.

Goose Lake National Forest—M. L. ERICKSON, Acting Forest Supervisor, Lakeview; R. F. HAMMATT, Forest Assistant, Lakeview.

Heppner National Forest—THOMAS E. CHIDSEY, Acting Forest Supervisor, Heppner.

Imnaha National Forest—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa.

Siskiyou National Forest—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.

Tillamook National Forest—F. E. AMES, Acting Forest Supervisor, Eugene.

Umpqua National Forest—F. E. AMES, Acting Forest Supervisor, Eugene.

Wenaha National Forest—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash.

WASHINGTON.

Colville National Forest—W. W. CRYDER, Acting Forest Supervisor, Republic.

Olympic National Forest—FRED HANSON, Forest Supervisor, Hoodspport.

Rainier National Forest—G. F. ALLEN, Forest Supervisor, Orting.

Washington National Forest (East)—G. W. MILHAM, Forest Supervisor, Chelan.

Washington National Forest (West)—GEORGE B. COLEMAN, Forest Supervisor, Sumas; B. P. KIRKLAND, Forest Assistant, Sumas.

Washington National Forest (Yakima Division)—D. B. SELLER, Acting Forest Supervisor, Wenatchee.

Wenaha National Forest—J. M. SCHMITZ, Forest Supervisor, Walla Walla.

NATIONAL FORESTS NOT UNDER ADMINISTRATION.

District 1.—Little Rockies National Forest, Montana; Otter National Forest, Montana.

District 3.—Sacramento National Forest, New Mexico.

District 5.—Toyabe National Forest, Nevada; Toquima National Forest, Nevada; Manitou National Forest, Nevada.

SERVICE CHANGES IN APRIL, 1907.

APPOINTED.

Silviculture—

EXTENSION—

J. F. KÜMMEL, Forest Agent.

MANAGEMENT—

W. T. ANDREWS, Assistant Lumberman.

JOHN P. HUGHES, Assistant Lumberman.

WILLIAM S. UHLER, Assistant Lumberman.

WILLIAM R. MCKINNON, Assistant Lumberman.

MARK BURNS, Assistant Lumberman.

JOHN S. BAIRD, Assistant Lumberman.

Products—

DRAFTING—

Miss JOSEPHINE WAGGAMAN, Draftsman.

Miss CLARE B. NOYES, Draftsman.

COMPUTATION—

Miss ALVIS B. DAMON, Clerk.

Grazing—

Miss EDITH H. BARTMESS, Clerk.

Mrs. C. N. MILLER, Clerk.

Operation—**MAINTENANCE—**

Miss LURA M. HOLCOMBE, Clerk.
 Miss MARGARET E. BAKER, Clerk.
 Miss DORA REESE, Clerk.
 Miss GOLDIE M. RANDAL, Clerk.
 WALTER TATE, Unskilled Laborer.
 C. T. CURTIS, Unskilled Laborer.

FILES—

Miss BLANCHE PALISAY, Clerk.
 Miss L. M. McDEVITT, Clerk.
 Miss PEARLE P. CRAMER, Clerk.
 Miss NELLIE HUFF, Clerk.

TYPEWRITING—

Miss ETTA B. MCGRAW, Clerk.

LANDS—

GEO. F. POLLOCK, Chief of Office.

ACCOUNTS—

BENJ. H. DUTROW, Clerk.
 Miss JENNIE C. EISENSTEIN.

ORGANIZATION.

The following were appointed clerks for duty in supervisors' offices:

Mrs. FRANCES WILSON, Blue Mountains National Forest (West), Oregon.
 T. E. FITZGERALD, Hell Gate National Forest, Montana.
 GEORGE W. O'BRIEN, Imnaha National Forest, Oregon.
 ARTHUR N. MARR, Sierra National Forest (North), California.
 EDNA E. SLOSSON, Santa Barbara National Forest, California.
 THOMAS J. COLLINS, Sierra National Forest (South), California.
 F. A. FISH, Yellowstone National Forest (Shoshone Division), Wyoming.

The following were appointed Assistant Forest Rangers:

ALBERT L. SWEITZER, Montezuma National Forest, Colorado.
 W. A. JOHNSON, Klamath National Forest, California.
 JOHN BOOTH, Jemez National Forest, New Mexico.
 JACK R. BARBER, Tonto National Forest, Arizona.
 PARLEY P. BALDWIN, Monticello National Forest, Utah.
 ERNEST PACK, Monticello National Forest, Utah.
 ROBERT E. CLARK, Santa Barbara National Forest, California.
 HENRY F. VAN WINKLE, Santa Barbara National Forest, California.
 CHARLES H. PARK, Ranier National Forest, Washington.
 J. R. ROLLINSON, Yellowstone National Forest (Shoshone Division), Wyoming.
 BENJAMIN F. ELIASON, Fillmore National Forest, Utah.
 JOHN A. FERGUSON, Glenwood National Forest, Utah.
 THOMAS J. BURKE, Beaver National Forest, Utah.
 SEHI PETERSON, Jr., Fillmore National Forest, Utah.
 MORGAN PARKE, Pocatello National Forest, Idaho.
 GROVER T. GOODWIN, Pikes Peak National Forest, Colorado.
 W. T. STARK, Diamond Mountains National Forest, California.
 ADELBERT E. PATTEN, Diamond Mountains National Forest, California.
 A. B. FOSTER, Lassen Peak National Forest, California.

HOWARD M. CONRAD, Medicine Bow National (Wyoming Division) Forest, Wyoming.

FRANK CRAWFORD, Stony Creek National Forest, California.

ANDREW C. IVERSON, Medicine Bow National Forest, Colorado.

JOSEPHUS RYAN, Medicine Bow National Forest, Colorado.

GUY N. HUBBARD, Blue Mountains National Forest (West), Oregon.

J. B. KANDEL, Blue Mountains National Forest (West), Oregon.

MILTON R. JAYNE, Battlement Mesa National Forest, Colorado.

JOHN STEWART, Leadville National Forest, Colorado.

GLENN H. CROW, Sierra National Forest (North), California.

WILLIAM H. MILLER, Pikes Peak National Forest, Colorado.

EUSTACE A. WOODS, Lewis & Clark National Forest (South), Montana.

MARTIN L. McALLISTER, Sevier National Forest, Utah.

WILLIAM J. WALLACE, Battlement Mesa National Forest, Colorado.

JAMES E. JEWELL, Payette National Forest, Idaho.

HENRY S. MUSGRAVE, Klamath National Forest, California.

JAMES E. SHUE, Montezuma National Forest, Colorado.

EARL B. TANNER, Bitter Root National Forest, Montana.

The following were appointed Forest Planting Assistants:

NATHAN J. FETHEROLF, Salt Lake National Forest, Utah.

HARRY C. TURNER, Lincoln National Forest, New Mexico.

The following were appointed Forest Guards:

HERBERT L. HURD, Rainier National Forest, Washington.

JOHN JONES, Big Burro National Forest, New Mexico.

WILLIAM A. POE and HUGH H. GREENE, Black Hills National Forest, South Dakota.

CHARLES CALLAHAN, Stanislaus National Forest, California.

W. B. BOYES, Wichita National Forest, Oklahoma.

DONALD M. ROSE, Little Belt National Forest, Montana.

WILLIAM McCULLY, Goose Lake National Forest, Oregon.

JOSEPH S. FULLER, Goose Lake National Forest, Oregon.

W. R. HAMMERSLEY, Goose Lake National Forest, Oregon.

M. E. MUSGRAVE, Goose Lake National Forest, Oregon.

ANDREW J. DOWLING, Madison National Forest, Montana.

ORIN P. WILHOIT, Madison National Forest, Montana.

R. O. LEWIS, Little Belt National Forest, Montana.

E. O. BLANKENSHIP, Washington National Forest (East), Washington.

H. D. GARRISH, Salmon River National Forest, Idaho.

PAUL UNDERWOOD, Washington National Forest (East), Washington.

CLYDE L. UNDERWOOD, Washington National Forest (East), Washington.

J. D. MCGEE, Rainier National Forest, Washington.

GEORGE SCHUSTER, San Gabriel National Forest, California.

TIMOTHY J. CAMAHAN, Kootenai National Forest, Montana.

FRED WEIR, Manzano National Forest, New Mexico.

FRANK E. ANDREWS, Gila National Forest, New Mexico.

JAMES F. SWANK, Sierra National Forest (South), California.

JASON ELDER, Fremont National Forest, Oregon.

ORA COCKRELL, Salmon River National Forest, Idaho.

EARL R. GILBREATH, Salmon River National Forest, Idaho.

MONTY E. BUSTER, Lemhi National Forest, Idaho.

ROBERT B. MOORE, Lemhi National Forest, Idaho.

JAMES PELTON, Lemhi National Forest, Idaho.
 CHARLES BEACH, Salmon River National Forest, Idaho.
 JAMES H. JAMISON, Henrys Lake National Forest, Idaho.
 J. BILLINGS, Fremont National Forest, Oregon.
 JAMES BRADY, Fremont National Forest, Oregon.
 WILLIAM J. McDONALD, Lemhi National Forest, Idaho.
 WILLIAM H. BROCK, Fremont National Forest, Oregon.
 ROBERT GILLIES, Big Hole National Forest (South), Montana.
 GUY B. JELLERSON, Payette National Forest, Idaho.
 FRED W. CARL, Lemhi National Forest (North), Idaho.
 T. C. HEIGHE, Jr., Jemez National Forest, New Mexico.
 E. W. HULBERT, Lincoln National Forest, New Mexico.
 IRA TUNGATE, Ashland National Forest, Oregon.
 MELVIN L. LEWIS, Siskiyou National Forest, Oregon.
 FRED MERRIL, Siskiyou National Forest, Oregon.
 J. A. COOLEY, Sawtooth National Forest, Idaho.
 JAMES E. WRIGHT, Sawtooth National Forest, Idaho.
 ELMER BALLARD, Sawtooth National Forest, Idaho.
 WARREN JOHNSON, Sawtooth National Forest, Idaho.
 AL IVIE, Sawtooth National Forest, Idaho.
 FRANK GRAY, Sawtooth National Forest, Idaho.
 FRANK R. MARTIN, Sawtooth National Forest, Idaho.
 R. D. MATHIAS, Payette National Forest, Idaho.
 WILLIAM NEWMAN, Payette National Forest, Idaho.
 WILLIAM C. COOPER, Payette National Forest, Idaho.
 WILLIAM L. DODGE, Priest River National Forest, Idaho.
 SHERWOOD McEWAN, Priest River National Forest, Idaho.
 LEO NEAL, Heppner National Forest, Oregon.
 SYLVANUS WRIGHT, Heppner National Forest, Oregon.
 HOWARD GRIFFITH, San Gabriel National Forest, California.
 FRED S. BROOKS, Sierra National Forest (North), California.
 JAMES McNAMARA, Ruby Mountains National Forest, Nevada.
 GEORGE A. NORTON, Hell Gate National Forest, Montana.
 JAMES T. McKNIGHT, Big Hole National Forest (South), Montana.
 N. E. PETERSON, Black Hills National Forest, South Dakota.
 GEORGE E. PUMISTON, Madison National Forest, Montana.
 ALVA L. RAWSON, Weiser National Forest, Idaho.
 GROVER C. PRUITT, Hell Gate National Forest, Montana.
 ELLIS B. SNOW, Weiser National Forest, Idaho.
 FRANK AYERS, Salmon River National Forest, Idaho.
 ROSS S. TOBIAS, Salmon River National Forest, Idaho.
 LOUIS KNOWLES, Black Hills National Forest, South Dakota.
 DAVID B. GILMORE, Siskiyou National Forest, Oregon.
 J. A. SCOTT, Lincoln National Forest, New Mexico.
 M. A. MOCK, Rainier National Forest, Washington.
 JAMES E. QUIVEY, Cabinet National Forest (North), Montana.
 FRANK H. BUSH, Cabinet National Forest (North), Montana.
 MONTY E. BUSTER, Lemhi National Forest, Idaho.
 L. F. VINAL, Kootenai National Forest, Montana.
 W. A. RAYMOND, Kootenai National Forest, Montana.
 ARTMAN SNYDER, Kootenai National Forest, Montana.
 BERT A. McNAMARA, Ruby National Forest, Nevada.
 ROY YORK, Stony Creek National Forest, California.

J. W. STEEL, Hell Gate National Forest, Montana.
 J. S. FRASER, Blue Mountains National Forest (West), Oregon.
 C. S. CONGLETON, Blue Mountains National Forest (West), Oregon.
 J. H. SHERMAN, Manzano National Forest, New Mexico.
 E. M. CHRISTENSEN, Salmon River National Forest, Idaho.
 ARTHUR E. DOUGLAS, San Jacinto National Forest, California.
 GILBERT J. SPENCE, San Jacinto National Forest, California.
 STERLING P. ROACH, San Jacinto National Forest, California.
 JAMES E. BOOTH, San Jacinto National Forest, California.
 HENRY C. WILSON, San Jacinto National Forest, California.
 CLARENCE A. KING, San Jacinto National Forest, California.
 WILLIAM Q. DAVIDSON, San Jacinto National Forest, California.
 HENRY E. ENGRAHAM, San Jacinto National Forest, California.
 LOUIS J. TRIPP, San Jacinto National Forest, California.
 RICHARD W. YOUNG, Salmon River National Forest, California.
 FRED GRAHAM, San Bernardino National Forest, California.
 WALLACE MANARY, Lewis & Clark National Forest (South), Montana.
 BEN DAYTON, Lewis & Clark National Forest (South), Montana.
 CHARLES A. STRODBECK, Lewis & Clark National Forest (North), Montana.
 MARKUS RAND, Lewis & Clark National Forest (North), Montana.
 CHARLES E. BLUSH, Lewis & Clark National Forest (North), Montana.
 ELMER E. ELSWORTH, Lewis & Clark National Forest (North), Montana.
 ED FORTIN, Lewis & Clark National Forest (North), Montana.
 WILLIAM A. OWINGS, Lewis & Clark National Forest (North), Montana.
 CHARLES R. PETERSON, Lewis & Clark National Forest (North), Montana.
 PEARL TAYLOR, Lewis & Clark National Forest (North), Montana.
 REES R. JONES, Bear River National Forest, Utah.
 A. L. ANDREASEN, Bear River National Forest, Utah.
 FRANK W. PYEATT, Lemhi National Forest (North), Idaho.
 H. B. WEBBER, Lemhi National Forest (North), Idaho.
 JOHN OPALKA, Lewis & Clark National Forest (South), Montana.
 FRANK OPALKA, Lewis & Clark National Forest (South), Montana.
 H. VERNON ANDERSON, Ashland National Forest, Oregon.
 ED HAUFFMAN, Sawtooth National Forest, Idaho.
 FRANK HEDRICK, Payette National Forest, Idaho.
 LOUIS D. EDWARDS, Payette National Forest, Idaho.
 SETH ADAMSON, Sawtooth National Forest, Idaho.
 L. L. HAMMER, Sawtooth National Forest, Idaho.
 G. H. SWIFT, Sawtooth National Forest, Idaho.
 HOWARD HEDRICK, Sawtooth National Forest, Idaho.
 WALLACE MCPHETERS, Sawtooth National Forest, Idaho.
 ARCHIE PRICE, Sawtooth National Forest, Idaho.
 MICHAEL RODDY, Cabinet National Forest (South), Montana.
 C. D. SPRINGER, Cascade National Forest (North), Oregon.
 FRANCIS X. DRACHBAR, Wenaha National Forest, Washington.
 WILLIAM H. KENDALL, Wenaha National Forest, Washington.
 JAMES M. BENNETT, Washington National Forest (East), Washington.
 AARON T. SHANNON, Washington National Forest (East), Washington.
 ED TAYLOR, La Sal National Forest, Utah.
 JOHN GRAND, San Bernardino National Forest, California.
 PAUL HEATON, Washington National Forest (East), Washington.
 HARRY M. COLTER, Washington National Forest (East), Washington.
 DILMORE S. WRIGHT, Washington National Forest (East), Washington.

EMERY E. WILSON, Palouse National Forest, Idaho.
 H. L. SHAW, Sawtooth National Forest, Idaho.
 H. A. ATKIN, Payette National Forest, Idaho.
 G. N. BASSETT, Sawtooth National Forest, Idaho.
 H. H. TANSING, Sawtooth National Forest, Idaho.
 WILLIAM M. ELLIS, Stanislaus National Forest, California.
 ADOLPH ROMO, Stanislaus National Forest, California.
 BERT LEWIS, Stanislaus National Forest, California.
 RAY IVIE, Sawtooth National Forest, Idaho.
 WILLIAM A. BRIGHT, Sawtooth National Forest, Idaho.
 ELI EDWARDS, Missoula National Forest, Montana.
 THOMAS R. PINKERTON, Washington National Forest (East), Washington.
 D. R. MORRISON, Siskiyou National Forest, Oregon.
 J. G. GIDDINGS, Coquille National Forest, Oregon.

APPOINTMENTS REVOKED.

Operation—

ORGANIZATION—

LEWIS JOHNSON, Forest Guard, San Gabriel National Forest, California.
 FRANCISCO DELGADO, Clerk, Jemez National Forest, New Mexico.
 L. E. THOMAS, Forest Guard, Garden City National Forest, Nebraska.
 LEONARD OERTLI, Forest Guard, Hell Gate National Forest, Montana.
 CHARLES BEACH, Forest Guard, Salmon River National Forest, Idaho.
 MONTY BUSTER, Forest Guard, Lemhi National Forest, Idaho.
 ANDREW J. DOWLING, Forest Guard, Madison National Forest, Montana.
 STEPHEN C. MAHONEY, Forest Guard, Raft River National Forest, Idaho.
 S. GUY SOLOMON, Forest Guard, Tonto National Forest, Arizona.
 CLYDE L. UNDERWOOD, Forest Guard, Washington National Forest (East), Washington.
 PAUL HEATON, Forest Guard, Washington National Forest (East), Washington.
 E. D. PILANT, Forest Guard, Payette National Forest, Idaho.
 PAUL UNDERWOOD, Forest Guard, Washington National Forest (East), Washington.

PROMOTED.

Products—

DRAFTING—

GUY T. TREMBLEY, Draftsman.
 JOSEPH C. NOEL, Draftsman.

Operation—

ACCOUNTS—

GEORGE E. KING, from Clerk to Fiscal Agent.

ORGANIZATION—

ROY HEADLEY, from Deputy Forest Ranger to Deputy Forest Supervisor, Palouse National Forest, Idaho.
 WILLIAM H. GODDARD, from Forest Ranger to Deputy Forest Supervisor, Gila National Forest, New Mexico.
 CHARLES A. SCOTT, Forest Supervisor, Garden City National Forest.
 S. C. BARTRUM, Forest Supervisor, Cascade National Forest (South), Oregon.
 CHARLES A. BALLINGER, from Deputy Forest Ranger to Deputy Forest Supervisor, Slim Buttes, Short Pine, Long Pine, Ekalaka, and Cave Hills National Forests, South Dakota.

Operation—Continued.

ORGANIZATION—Continued.

H. W. THURSTON, from Forest Ranger to Deputy Supervisor, Yellowstone (Shoshone) National Forest, Wyoming.

CHARLES W. PACE, from Deputy Forest Ranger to Forest Ranger, Gunnison National Forest, Colorado.

PERRY L. SNODGRASS, from Deputy Forest Ranger to Forest Ranger, Gunnison National Forest, Colorado.

JOHN JONES, Forest Guard, Big Burro National Forest, New Mexico.

S. T. EZELL, Forest Guard, Sawtooth National Forest, Idaho.

JOHN VAN DEVENTER, from Assistant Forest Ranger to Deputy Forest Ranger, Trabuco Canyon National Forest, California.

MATHEW M. SIMMS, from Deputy Forest Ranger to Forest Ranger, San Jacinto National Forest, California.

WILLIAM H. DAUGS, to Deputy Supervisor, Lewis & Clark National Forest (North), Montana.

WILLIAM H. CRYDER, Jr., from Deputy Forest Ranger to Forest Ranger, and placed in charge of Colville National Forest, Washington.

DAVID E. FITTON, from Deputy Forest Ranger to Deputy Supervisor, and transferred from San Juan to Las Animas National Forest and placed in charge of the Las Animas National Forest.

J. F. JEKEN, to Deputy Forest Ranger, San Bernardino National Forest, California.

GEORGE C. SMITH, from Assistant Forest Ranger to Deputy Forest Ranger, Bear Lodge National Forest, South Dakota.

J. W. NELSON, to Deputy Forest Supervisor, Medicine Bow, Sierra Madre, and Crow Creek National Forests, Wyoming. Transferred from Yellowstone National Forest (Shoshone Division).

DAVID O. THEUER, Forest Guard, Bear River National Forest, Utah.

ROBERT L. CAMPBELL, Clerk.

HUGH M. GUTHRIE, from Assistant Forest Ranger to Deputy Forest Ranger, Siskiyou National Forest, Oregon.

THOMAS E. CHIDSEY, from Assistant Forest Ranger to Forest Ranger and placed in charge of Heppner National Forest, Oregon.

MILTON J. ANDERSON, to Acting Supervisor in charge of the Ashland, Coquille, and Siskiyou National Forests, Oregon.

RESTORED FROM FURLOUGH.

Silviculture—

EXTENSION—

FRANK G. MILLER.

Operation—

ORGANIZATION—

DAVID H. WILLIAMS, Forest Ranger, Manti National Forest, Utah.

HOMER ROSS, Assistant Forest Ranger, Rainier National Forest, Washington.

E. J. WIGAL, Assistant Forest Ranger, Rainier National Forest, Washington.

CLARENCE W. FRYE, Assistant Forest Ranger, Sierra National Forest (South), California.

WARREN M. COOPER, Deputy Forest Ranger, Cascade National Forest (North), Oregon.

RALPH W. GORDON, Assistant Forest Ranger, Black Hills National Forest, South Dakota.

JOHN B. PESTONI, Assistant Forest Ranger, Stanislaus National Forest, California.

Operation—Continued.

ORGANIZATION—Continued.

ROBERT W. McDONALD, Assistant Forest Ranger, Gunnison National Forest, Colorado.

HENRY WALDREF, Assistant Forest Ranger, Lewis and Clark National Forest (South), Montana.

THOMAS N. REYNOLDS, Assistant Forest Ranger, Pecos River National Forest, New Mexico.

JOSIAH SHURTZ, Assistant Forest Ranger, Aquarius National Forest, Utah.

JOHN P. BROCKBANK, Assistant Forest Ranger, Manti National Forest, Utah.

JOSEPH W. HUMPHREY, Assistant Forest Ranger, Manti National Forest, Utah.

WALTER E. HANKS, Assistant Forest Ranger, Aquarius National Forest, Utah.

R. H. LISTON, Assistant Forest Ranger, Aquarius National Forest, Utah.

WILFORD PACE, Forest Ranger, Fish Lake National Forest, Utah.

PARLEY MADSEN, Assistant Forest Ranger, Uinta National Forest, Utah.

HENRY ALBRECHT, Assistant Forest Ranger, Fish Lake National Forest, Utah.

WILLIAM E. SIMONS, Assistant Forest Ranger, Cascade National Forest (North), Oregon.

ROBERT J. WATSON, Assistant Forest Ranger, Cascade National Forest (South), Oregon.

WILLIAM J. NICHOLS, Assistant Forest Ranger, Cascade National Forest (South), Oregon.

C. V. ODEN, Assistant Forest Ranger, Cascade National Forest (South), Oregon.

ROY HARVEY, Deputy Forest Ranger, Cascade National Forest (South), Oregon.

JOHN B. SENECA, Assistant Forest Ranger, Cascade National Forest (North), Oregon.

SILAS McKEE, Assistant Forest Ranger, Cascade National Forest (South), Oregon.

E. C. NEWMAN, Deputy Forest Ranger, Olympic National Forest, Washington.

JAMES L. BIXBY, Assistant Forest Ranger, Olympic National Forest, Washington.

JOHN DYKE, Assistant Forest Ranger, Olympic National Forest, Washington.

GEORGE W. CHAMBERLAIN, Assistant Forest Ranger, Plumas National Forest, California.

BYRON W. HENNINGS, Assistant Forest Ranger, Lewis and Clark National Forest (North), Montana.

OLANDO HEDRICK, Assistant Forest Ranger, Lassen Peak National Forest, California.

AUSTIN E. DARBY, Assistant Forest Ranger, Plumas National Forest, California.

THOMAS F. HOWELL, Assistant Forest Ranger, Lassen Peak National Forest, California.

HARVEY ABBEY, Assistant Forest Ranger, Diamond Mountain National Forest, California.

FRANK MAZRALL, Assistant Forest Ranger, Lewis and Clark National Forest (North), Montana.

Operation—Continued.**ORGANIZATION—Continued.**

LEWIS PURDY, Assistant Forest Ranger, Lewis and Clark National Forest (North), Montana.

GEORGE E. BELKNAP, Assistant Forest Ranger, Yellowstone National Forest, (Wind River Division), Wyoming.

WALTER K. ROBINSON, Assistant Forest Ranger, Trabuco Canyon National Forest, California.

FRANK O. SPARHAWK, Assistant Forest Ranger, Yellowstone National Forest (Shoshone Division), Wyoming.

GILBERT D. BROWN, Assistant Forest Ranger, Fremont National Forest, Oregon.

JOSEPH C. MADSEN, Assistant Forest Ranger, Payson National Forest, Utah.

RAYMOND TYLER, Deputy Forest Ranger, Sierra National Forest (North), California.

HIRAM H. MCNIEL, Assistant Forest Ranger, Washington National Forest (East), Washington.

REINSTATED.**Operation—****ORGANIZATION—**

SHIRLEY BUCK, Clerk, Wenaha National Forest, Oregon.

FURLOUGHED.**Silviculture—****MANAGEMENT—**

WILLIAM BRIDGE PIPER.

Products—**DRAFTING—**

T. C. COLEMAN.

Operation—**ORGANIZATION—**

OTTO W. HOEGER, Assistant Forest Ranger, Santa Barbara National Forest, California.

JOSEPH W. HUMPHREY, Assistant Forest Ranger, Manti National Forest, Utah.

PHILIP BEGUE, Deputy Forest Ranger, San Gabriel National Forest, California.

TRANSFERRED.**Operation—****ORGANIZATION—**

J. H. KINNEY, from Boundaries to Organization to assume charge of the Lincoln and Gallinas National Forests.

H. D. FOSTER, Forest Assistant, from Wenaha National Forest to the Blue Mountains National Forest (East), Oregon.

SEROPE Y. BARNEY, Forest Expert, from Forest Extension to Organization, and assigned to duty on Pecos National Forest, New Mexico.

EDWARD C. CLIFFORD, Forest Assistant, from Forest Extension to Organization, and assigned to duty on the San Gabriel National Forest, California.

WALTER B. HADLEY, Forest Assistant, from Forest Extension to Organization, and assigned to duty on the Gila National Forest, New Mexico.

WILLIAM H. MAST, Forest Assistant, from Forest Extension to Organization, and assigned to duty on the Dismal River National Forest, Nebraska.

Operation—Continued.

ORGANIZATION—Continued.

- HENRY C. MUZZALL, Forest Planting Assistant, from Forest Extension to Organization, and assigned to duty on the Santa Barbara National Forest, California.
- LA MOREE BESLEY, Forest Planting Assistant, from Forest Extension to Organization, and assigned to duty on the Dismal River National Forest, Nebraska.
- PERCY GARDNER, Assistant Forest Ranger, from Trinity National Forest to San Luis Obispo National Forest, California.
- ROSS McMILLAN, Supervisor, from Portales National Forest to Jemez National Forest, New Mexico.
- GERALD MERRILL, Assistant Forest Ranger, from Tonto National Forest to Mount Graham National Forest, Arizona.
- GEORGE A. BONEBRAKE, Assistant Forest Ranger, from Ashland National Forest to Cascade National Forest (South), Oregon.
- H. J. BROWN, Forest Assistant, from Minnesota National Forest, Minnesota, to Black Hills National Forest, South Dakota.
- JOHN H. HATTON, Forest Inspector, from Organization to General Inspection.
- JOHN KERR, Supervisor, from Lincoln National Forest and Gallinas National Forest to Magdalena and San Mateo National Forests, New Mexico.
- C. JARVIS, Assistant Forest Ranger, from Lolo National Forest to Hell Gate National Forest, Montana.
- MORRIS CHRISMAN, Forest Guard, from Santa Rita National Forest to Santa Catalina National Forest, Arizona.
- BIRTSALL W. JONES, Assistant Forest Ranger, from Santa Catalina National Forest to Santa Rita National Forest, Arizona.
- ELIAS H. SMITH, Deputy Forest Ranger, from Dixie National Forest to Sevier National Forest, Utah.
- E. W. SHAW, Forest Ranger, from Boundaries to Organization, Lincoln National Forest, New Mexico.
- F. D. WHITNEY, Forest Ranger, from Boundaries to Organization, Park Range National Forest, Colorado.
- FRED W. MORRELL, Forest Assistant, from Holy Cross National Forest to Pikes Peak National Forest, Colorado.
- MORGAN PARKE, Forest Guard, from Pocatello National Forest to Raft River National Forest, Idaho.
- ARTHUR E. MOODY, Forest Guard, from Tumacacori National Forest to Huachuca National Forest, Arizona.
- GEORGE E. BELKNAP, Assistant Forest Ranger, from Yellowstone National Forest (Shoshone Division) to Yellowstone National Forest (Wind River Division), Wyoming.
- DANIEL S. MARSHALL, Deputy Supervisor, from Charleston National Forest, Nevada, to Uinta National Forest, Utah.
- GEORGE F. RANNEY, Forest Guard, from Bighole National Forest (North) to Hell Gate National Forest (East), Montana.
- MARSHALL GIFFIN, Forest Ranger, from Imnaha National Forest, Oregon, to Blue Mountains National Forest (East), Oregon.
- EUGENE WILLIAMS, Supervisor, from San Isabel and Wet Mountains National Forests to Cochetopa National Forest, Colorado.
- GILBERT D. BROWN, Assistant Forest Ranger, from Cascade National Forest (South) to Fremont National Forest, Oregon.

Operation—Continued.**ORGANIZATION—Continued.**

BURT P. KIRKLAND, Forest Assistant, from Yellowstone National Forest (Absaroka Division) to Washington National Forest (West), Washington.

HIRAM H. McNEIL, Assistant Forest Ranger, from Washington National Forest (East) to Colville National Forest, Washington.

L. F. KNEIPP, Supervisor, from National Forest Organization to General Inspection.

D. B. SELLER, Acting Supervisor, from Heppner National Forest, Oregon, to Yakima Division of Washington National Forest, Washington.

J. F. BRUNS, Forest Assistant, from Henrys Lake National Forest, Idaho, to Organization.

W. W. CRYDER, Forest Ranger, from Rainier to Colville National Forest, Washington.

F. E. AMES, General Inspection to Acting Supervisor. Umpqua and Tillamook National Forests, Oregon.

PAUL G. REDINGTON, Forest Inspector, from Forest Management to National Forest Organization.

D. D. BRONSON, Forest Inspector, from General Inspection to National Forest Organization.

STUART J. FLINTHAM, Forest Assistant, from Extension to General Inspection.

RESIGNED.**Silviculture—****MANAGEMENT—**

J. ST. J. BENEDICT, Forest Student.

Operation—**ORGANIZATION—**

CASSIUS M. DAY, Supervisor, Bitter Root National Forest, Montana.

L. G. DAVIS, Supervisor, Medicine Bow (Wyoming) and Sierra Madre and Crow Creek National Forests.

FRED K. WYMAN, Assistant Forest Ranger, Lewis and Clark National Forest (South), Montana.

MARSHALL FULFORD, Deputy Forest Ranger, Holy Cross National Forest, Colorado.

GEORGE E. ROOT, Assistant Forest Ranger, Santa Barbara National Forest, California.

JOHN HALL, Jr., Deputy Forest Ranger, Black Mesa National Forest, Arizona.

JOHN THOMSON, Clerk, Lincoln National Forest, New Mexico.

JOHN H. HECTOR, Assistant Forest Ranger, Santa Barbara National Forest, California.

L. T. HILDEBRAND, Forest Guard, San Luis Obispo National Forest, California.

ROBERT L. SWANSON, Assistant Forest Ranger, Shasta National Forest, California.

JOHN DYKE, Assistant Forest Ranger, Olympic National Forest, Washington.

FRED E. EVANS, Assistant Forest Ranger, Cascade National Forest (North), Oregon.

PORTER H. SISNEY, Assistant Forest Ranger, Jemez National Forest, New Mexico.

SEPARATED.

J. P. BUTLER, Clerk, Sierra National Forest (South), California.

JOHN D. MAXFIELD, Assistant Forest Ranger, San Jacinto National Forest, California.

HORACE W. CRANDELL, Assistant Forest Ranger, San Bernardino National Forest, California.

DISMISSED FROM SERVICE.**Products—****DRAFTING—**

EARLE S. DEAN, Draftsman.

Operation—**ORGANIZATION—**

GEORGE F. HARRIS, Assistant Forest Ranger, Black Hills National Forest, South Dakota.

31564—07—4 .

SERVICE NOTES FOR MAY.

OFFICE OF THE FORESTER.

LAW.

Mr. A. C. Shaw will visit the offices of many of the supervisors during the summer season, to instruct and assist them in the preparation of case for trial and in other legal matters. He will be at Denver, Colo., May 11; at Cheyenne, Wyo., May 13; at Deadwood, S. Dak., May 17; at Leadville, Colo., May 22; at Moffatt, Colo., May 25; at Santa Fe, N. Mex., May 28; at Capitan, N. Mex., June 2; at Paradise, Ariz., June 8; at Susanville, Cal., after June 12, indefinitely.

This programme may be varied by Mr. Shaw as necessity demands, but he will notify the supervisors of any change.

The Secretary of Agriculture has sustained the decision of the Forester, dated August 2, which granted to the city of Manitou, Colo., the right to use the bed of French Creek to carry the waters which had been legally appropriated for municipal uses. The Secretary's decision ended a long fight against the city, and followed the decisions of the supreme court of the State of Colorado, which recognized the right of appropriators of water to use every convenience which nature has provided for transporting the water.

The General Land Office has, upon the recommendation of the Forester, ordered a hearing upon the alleged illegal mineral land claims of H. H. Yard in the Plumas National Forest. This hearing will take place at Susanville, Cal., probably in May or early in June, and will involve a claim to 18,000 acres of land.

The Forester has held, in a letter to the supervisor of the Grand Canyon National Forest, that the Forest Service can not legally recognize any lease made by the Territorial authorities for unsurveyed lands which it is claimed will, when surveyed, become sections 16 and 36. The decision follows the decision of the Supreme Court in the case of *Heydenfeldt v. Daney Gold Mining Company* (93 U. S., 634); the decision of the Secretary in *Barnhusht v. State of Utah* (30 L. D., 314), and the State of South Dakota *v. Riley* (34 L. D., 657); and holds also that the Territory is fully compensated for its loss under section 2275, United States Revised Statutes, as amended by the act of Congress of February 28, 1891.

DENDROLOGY.

Notes on the Distribution of Trees.

[Except when otherwise stated, it is to be understood that observers whose names are given in these notes are members of the Forest Service.]

White-bark pine (*Pinus albicaulis*).—The eastern limit of white-bark pine in Montana has been recently extended by J. H. Hatton, E. E. Carter, L. Wessel, M. N. Stickney, and J. B. Leiberg (the latter not of the Forest Service). Mr. Hatton found it in the Bear Paw Mountains, Chouteau County (longitude $109^{\circ} 30'$), while Mr. Leiberg found it in 1903 in the Little Belt Mountains (longitude $110^{\circ} 40'$) on the summits of Mixes Baldy, Yogo Peak, and on Neihart Baldy. Messrs. Carter and Wessel discovered it in 1907 in T. 14 N., R. 8 E., northeast of Neihart, from which point this Office has received specimens. In 1906 Mr. Stickney observed it still farther south on the high peaks of the Big Belt Mountains (longitude $111^{\circ} 30'$).

Alpine fir (*Abies lasiocarpa*).—Until recently alpine fir has been known in Alaska only east of the Coast Range as far north as the head of Lynn Canal (latitude $59^{\circ} 30'$) and Lake Bennett (latitude 60° , longitude 135°). Its abundance here, however, led to the expectation that it would be found in the Yukon Valley considerably farther northward and westward. George B. Sudworth recently recognized trees of this species in two excellent photographs taken by F. C. Shrader and W. C. Mendenhall, of the U. S. Geological Survey, in the Copper River country, which is 380 miles northwest of Lake Bennett. The trees are scattered over the river bottom and lower mountain slopes of Copper River at Copper Center (latitude 62° , longitude $145^{\circ} 20'$) and in Mentasta Pass between the Copper and Tanana drainage basins on the Copper River—Yukon Railway line. These points are the farthest northwestward in North America ever recorded for any species of fir. The nearest and most northern point of occurrence, besides Lake Bennett, is on the North Fork of the McQuestion River, a branch of Stewart River (latitude $64^{\circ} 30'$, longitude 136°), which is 260 miles to the northeast, where the tree was discovered by J. Keele, of the Canadian Geological Survey in 1905.

The southern limits of Alpine fir in Idaho have been determined lately through field notes of Dr. C. H. Merriam, Bureau of Biological Survey, G. E. Tower, R. E. Benedict, W. T. Cox, H. P. Baker, C. E. Dunston, A. F. Boisen, J. B. Bruins, E. H. Harefird, F. W. Reed, A. F. Potter, W. J. Gardner, and Smith Riley. Beginning at the west, it has been reported from the Weiser, Payette, Salmon River, Sawtooth, Lemhi, and Big Hole National Forests on the north of Snake River, and from the Henry's Lake, Caribou, and Bear River National Forests on the south of Snake River. Southward in Utah it is known to occur in all the mountains as far as the Sevier National Forest, but its distribution in this part of the Great Basin is still imperfectly known, and it is hoped that further and fuller reports will be made. J. B. Leiberg recently reported that in southern Oregon it extends to the Umpqua-Rogue River divide and as far south as the north side of the Siskiyou Mountains, an extension of about 60 miles.

White fir (*Abies concolor*).—The previously known range of this fir has been recently extended into the high mountains of northern Utah, southern Idaho, and northern Nevada through field notes of W. J. Gardner, A. F. Potter, F. W. Reed, and Smith Riley, who have reported it from the Bear River and Raft River National Forests, northern Utah and Southern Idaho; from the Caribou and Port Neuf National Forests, southeastern Idaho; from Goose Creek, and

Shoshone Mountains, Cassia County, southern Idaho, and from the Independence National Forest, northern Nevada. Further and more detailed reports are desired from these stations.

White fir has been reported provisionally in the Blue and Powder River mountains, northeastern Oregon, but further observations or specimens are required for confirmation. The northern limit of white fir in Colorado is also still undetermined. Field notes of George B. Sudworth, S. B. Detwiler, J. H. Ramskill, and J. G. Jack, of the Arnold Arboretum, have established its presence on the eastern slope of the front range as far north as Plum Creek, a tributary of the South Platte River, and probably also in the Leadville National Forest, but it is not known to have been observed in the Medicine Bow, Holy Cross, Gunnison, Uncompahgre, nor Battlement Mesa National Forests, although it is more or less common in the National Forests to the south. The only station reported for this fir in the White River National Forest was found by George B. Sudworth in 1898, on the western border of the reserve near Canyon Creek, a tributary of the Grand River.

Amabilis fir (Abies amabilis).—There appears to be some confusion in regard to what firs occur on the western slopes of the Coast Range of southern Alaska and British Columbia. *Abies amabilis* and *A. lasiocarpa* are the only firs possible in that region. The alpine fir is apparently not found at all on the seaward side of the Coast Range, nor on Vancouver Island, although it is abundant on the eastern slope of the Coast Range and throughout the interior plateau of British Columbia, while farther north it crosses White Pass and descends to sea-level at Lynn Canal. Between this and Boca de Quadra Inlet no fir has been found on the coast, and the species which extends thence southward on the Coast is *Abies amabilis*. Whether or not it extends southward to the United States on the seaward side of the Coast Range of northern British Columbia is at present unknown, for records of it on Queen Charlotte Islands and for the territory between Alaska and the northern end of Vancouver Island are wanting. It is common, however, on Vancouver Island and on the opposite mainland.

Noble fir (Abies nobilis).—The actual southern limit of *Abies nobilis*, presumably not south of Oregon, is believed to be unknown at present. Browder Ridge, in Lane County, on the headwaters of McKinzie River, a branch of the Willamette River about halfway down the State, has heretofore been the southmost point at which this tree has been observed. It may well be looked for, however, as far south as the north line of California, since authentic specimens, recently collected by A. E. Cohoon and Raphael Zon on the north side of the Siskiyou Mountains in the Ashland National Forest, have been identified in this office as *Abies nobilis*. Reports of it have been made previously at Crater Lake and in the Cascades and Coast Mountains.

Alpine hemlock (Tsuga mertensiana).—The northern and western range of Alpine hemlock in Alaska has been extended recently by W. A. Langille, and by W. H. Osgood, of the Biological Survey. Mr. Langille found it in the upper forest of the coast country from Lynn Canal westward to Prince Williams Sound, where it descends to sea level, and thence from sea level to timber line extends along the eastern shores of the Kenai Peninsula to Resurrection Bay and across the Peninsula to Turnagain Arm of Cook Inlet, being observed here also by Mr. Osgood. In this locality it reaches its western and northern limits in latitude $61^{\circ} 10'$, longitude 150° , at the head of Yukla Creek on the north slope of the divide between Turnagain Arm and Knik Arm.

In Washington the distribution of alpine hemlock is still imperfectly known and requires further careful observations to clear up several doubtful points. For example, it is abundant in the Olympic and Cascade mountains, but it

has not been reported in the high mountains of Okanogan and Stevens counties, in the northeastern part of the State, although it appears in northern Idaho and Montana and has been seen in the southeastern corner of Washington on a single peak of the Blue Mountains, as well as near by in the Powder River Mountains of Oregon. The most eastern occurrence reported is in the Cascade Range of Washington, on an island in the Stehekin River about 5 miles above Lake Chelan, where it was noted in 1900 by George B. Sudworth and in 1905 by E. E. Carter.

In southern Oregon its range was extended in 1899 to the Siskiyou Mountains by J. B. Leiberg, where it was observed also by W. T. Cox in 1903 and by C. J. Buck in 1906, while in northern California its presence on the high ranges between Shasta Valley and Butte Creek, north of Mount Shasta, was recently discovered by R. T. Fisher. R. B. Wilson reported it in the Klamath National Forest in 1904. Nothing is known concerning its distribution there, however, beyond the fact that it occurs on the Siskiyou and on the range west of Crescent City, where it was reported by A. J. Johnson in 1898. It is also known to occur in the Trinity Mountains, but so far only at the head of Canyon Creek, where Miss Alice Eastwood found it in 1902.

In the Sierra Nevada alpine hemlock is known at only one place on the eastern slopes, which is on the head of Owens River, a station discovered by F. V. Coville in 1891. It may possibly be discovered at other points on the east side, but it is doubtful. A very considerable and rather remarkable extension into the San Jacinto Mountains of southern California has been made recently by George B. Sudworth, who recognized this tree in a photograph taken by T. B. Lukens in 1900. The southern limit of alpine hemlock in the Sierras is on the head of Bubbs Creek (latitude $36^{\circ} 45'$) while the San Jacinto Mountains are some 200 miles south of that point. The photograph shows a single large tree on Wellman Flat (T. 5 S., R. 4 E.) at an elevation of 7,500 feet. Doubtless other trees are to be found at this and other high places in these mountains, in which it is hoped full observations can be made soon.

The occurrence of alpine hemlock in northern Idaho and Montana is very limited. In Idaho it is known only in the Cœur d'Alene Mountains northward to the divide between the North and the South Forks of Cœur d'Alene River, where it was noted by J. B. Leiberg in 1897, and in the Bitter Roots on the divide between the North Fork of the Clearwater and the Lochsa River, being found here also by Mr. Leiberg in 1900. In Montana only two small groves are known, one on an eastern spur of the Cœur d'Alene Mountains, between Thompson and Little Bitter Root Creeks, where it was seen by H. B. Ayres in 1893. The other station is on the west side of the Continental Divide at the pass between the Swan and the Clearwater rivers, where Mr. Ayres found it in 1899.

Alpine larch (Larix lyallii).—The little-known range of this larch has been considerably extended southward in Montana through the recent observations of W. G. Weigle, Coert Du Bois, and R. V. R. Reynolds. In 1905 Mr. Reynolds noted it in the Missoula National Forest west of the Clearwater River, an extension southwestward of about 30 miles from the southernmost station previously known, which is near Pend d'Oreille Pass in the Lewis and Clark National Forest. Mr. Du Bois observed it in 1904, and Mr. Weigle in 1906, still farther south on the highest mountains of the Big Hole National Forest. Mr. Weigle, however, traced it southward to Mount Haggin (about 6 miles southwest of Anaconda), a point at least 75 miles south of the previously recorded southern limit.

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Certificate of Publication—

Neglect on the part of forest officers in charge of National Forests to send to the Forester Form 935, "Certificate of Publication," in Class C timber sales, as required by "The Use Book," page 39, always causes delay in handling the timber sales. This form properly filled in, and with a clipping of the advertisement attached, should be sent to the Forester as soon as the first publication has appeared. Without this form it is impossible for the Washington office to know upon what date the bids in each case should be opened.

Management Men Temporarily Assigned—

Technical men from the Office of Forest Management are temporarily assigned to assist forest supervisors on the National Forests in which the timber-sale work is especially large and important. Such men are expected to assist the supervisor by carrying on under his direction such work as the preliminary examination and estimate of proposed sales, the marking of timber and the instruction of local forest officers in timber marking, and to consult freely with the supervisor regarding all phases of the technical timber work on his National Forest. They should in no case be assigned to do rangers' work, such as attending to grazing business, or examining agricultural and other claims.

As soon as the technical work requiring the presence of extra men from the Office of Management has decreased, or is in condition to be handled by the local forest officers alone, the supervisor should promptly report to the Forester, in order that the assistants may be directed to proceed to some other National Forest where their services are more urgently needed.

Assistant Lumbermen—

Assistant lumbermen are assigned temporarily to the National Forests where the need for their work arises. While on a National Forest they are under the direction of the supervisor, but their disposition will be controlled by the Washington office, and the supervisor should fully understand that they are subject to transfer on very short notice from one Forest to another when the need for their services elsewhere is urgent. But after the assignment of an assistant lumberman to a National Forest, and until otherwise instructed by the Washington office, the supervisor should direct the movements of the assistant lumberman within his National Forest and should see that his services are utilized to the best advantage.

Owing to the large number of existing sales where work is actually being carried on their time will be mainly occupied in supervising logging operations and in check-scaling. It is expected that along these lines the assistant lumbermen will be of great assistance to the local officers. Assistant lumbermen can be used to advantage also in cruising and reporting on tracts of timber for which there is either an application or a chance of an early sale.

The assistant lumbermen should report fully on the scaling methods in practice in any particular locality in which they are working, noting the defects of the methods, and should recommend changes and improvements if such are thought necessary.

The reports of assistant lumbermen should be addressed to the Forester and transmitted through the supervisor, who should not hesitate to comment freely on such reports.

Advertising Timber Sales—

It appears that in a number of cases supervisors have not taken the best means for advertising contemplated timber sales. Care should be exercised in recommending the paper best fitted to bring notices of sale before possible purchasers, especially lumbermen, and efforts should be made in other ways to give sales due publicity. When there are good chances for competitive bids and in very large and important sales the notice of sale should be published in two or more papers or lumber trade journals.

Forest officers should be very careful to follow the instructions given in National Forest Order No. 18 in regard to the recommendation of newspapers in which notices of sale are to appear. Unnecessary delay has occurred in a number of sales from failure on the part of the officers in charge to recommend newspapers when sending in applications and from their omitting to make the further recommendations called for by the National Forest Order. In every case the recommendations should give the exact name of the newspaper, its place of publication, and the edition in which the notice of sale should be inserted.

Reports of Timber Cut—

Forest officers should see that all values and totals are filled in completely in all "Reports of Timber cut" (Form 820) submitted. When different species or green and dead timber are sold at the same stumpage rate it is unnecessary to keep separate scale records for each.

Free-Use Reports—

Free-Use reports for the year 1906 have all been received. They show that 15,071 permits were issued, covering 4,800,000 feet of green timber, 3,290,000 feet of dead timber, 6,982,000 feet of mixed material, 9,947 cords of green wood, 55,000 feet of dead wood, 35,000 feet of mixed, 6,700,000 poles, 375,000 posts. The total valuation is \$76,854.

It is very evident from the foregoing figures that the supervisors of the various National Forests should discourage, so far as possible, the disposal of green timber under the "free-use" privilege.

Error in April Field Program—

Attention is called to an error in the Field Program for April. In the discussion of the revised Form 820 it is stated: "It is intended that if a case is ready for closing a negative answer under this paragraph is sufficient." The mistake occurred in the use of the word "negative" instead of "affirmative."

Timber Sales in March—

During the month of March, 1907, a total of approximately 25,000,000 feet of timber was applied for, valued at \$81,700. One hundred and thirty-five million feet of timber were actually sold, and in value amounted to \$406,626. The actual amount of timber cut was 11,390,000 feet, valued at \$26,000. The latter

item shows that cutting operations on all National Forests are more or less at a standstill on account of unfavorable weather conditions. The most important sale of this month was that to the Greenlaw Lumber Company in the San Francisco Mountains National Forest. The total amount of money to be paid in this sale within five years is \$315,000.

Timber Sale Contract Forms—

The new form of Timber Sale Contracts 202—A and B, which supersedes Form S21, has recently been issued, includes more regulations common to all sales and more space to insert regulations necessary to meet special conditions. It will save much of the time formerly used in drawing up contracts for large sales. It is recommended that all supervisors hereafter use this form for all Class B and C sales. Those having a supply of Form S21 may still use them for Class A sales.

OFFICE OF FOREST EXTENSION.

Progress of the Germination Tests of Forest Tree Seeds—

The practical soil tests to determine the germination per cent of the forest tree seeds that are to be planted this spring and the effect of different methods of storage are progressing very satisfactorily.

In a number of the seed flats sown in the latter part of February comparatively few seeds germinated and these damped off soon after coming up, whereas adjacent flats sown at a later date showed a normal germination per cent.

This led to an investigation, which was conducted by Doctor Metcalf, of the Bureau of Plant Industry, who upon microscopical examination of a number of the damped-off seedlings and ungerminated seeds found that they were affected by a very destructive and stubborn fungus, which was not known to be present in the greenhouse or to prevent the germination of tree seeds.

A new test of the same species was undertaken at once with different soil and the results have been very satisfactory. Over 50 per cent of the seeds have germinated to date, and none have thus far given any indication of being affected by a fungous disease.

It is to be hoped that a series of experiments may be undertaken in cooperation with the Bureau of Plant Industry to ascertain whether or not the soil treatment thus far found so satisfactory in preventing different seeds of farm crops from being affected by a fungous disease will not apply also in the case of forest-tree seeds.

Ranger Station Diagrams—

Officers in charge are urged to exercise the utmost care in scanning all diagrams for Ranger Stations before they are sent in.

A great deal of the work submitted heretofore has been so wrongly made up that it could not be used. In many cases it has been necessary to return such diagrams for correction, entailing much extra correspondence and delay.

National Forest Order 23, Part 4, which was mailed April 27, tells exactly how these diagrams are to be made up. The most ordinary errors are in not using the tracing linen Form 878, and in not using India ink, though almost every other conceivable evasion of the rules has been noted from time to time.

These instructions should be read carefully and followed strictly. They are not very complicated, and every requirement in them is necessary to carry this work on smoothly.

Especial attention is called to Paragraphs 34 and 35 of the new Order.

Dismal River National Forest—

On April 5 field planting was begun at the Halsey Planting Station on the Dismal River National Forest. The weather has not been altogether favorable for planting and unless more rain falls the percentage of failures will be large. A force of forty men is employed in the planting work, and it is the plan to plant nearly 500,000 trees in the Dismal River National Forest this season. Some planting will also be done on the North Platte and Niobrara National Forests.

Plantation of Eucalypts—

The commercial planting of eucalypts in California is receiving much attention at present. The number of inquiries received by this Office in regard to these trees is constantly increasing, and many large plantations are being established. In the past two weeks two California companies have begun planting eucalypts; one on an area of 2,600 acres, another on a 600-acre tract.

Hardy catalpa and black locust are being planted extensively in the East and Middle West. A good example of the profits realized from such planting was reported from Pawnee County, Nebr., where a 20-acre plantation of hardy catalpa was made sixteen years ago. When cut this winter the actual yield was 35,935 first-class posts and 17,349 second-class posts, and 690 8-16 feet posts in addition to 214 cords of wood. The net proceeds per acre were \$152.17. Allowing 5 per cent compound interest on the investment, this gives an annual cash rental of \$6.24 per acre. A planting plan for an 800-acre locust plantation in Woods County, Okla., recently made by the Forest Service was put into effect last month.

Mount Helena Forest Park—

The planting in Mount Helena Park, near Helena, Mont., which was done last October in accordance with the planting plan prepared by the Forest Service in 1905, has shown the advisability of fall planting there. A recent count shows that 92 per cent of the Douglas fir and 60 per cent of the yellow pine have survived the winter and are in condition to make a good growth this spring. The planting of last May was a total failure.

Cooperative State Nursery and Planting Experiments—

The plans for the nursery and planting experiments begun last year by the Forest Service in cooperation with several State institutions are being vigorously carried forward. The object of these experiments is to determine the species best adapted to the different regions, and to test silvicultural methods of a practical and scientific value.

At the North Dakota Agricultural Experiment Station near Fargo, and at the substation of the Nebraska Agricultural Experiment Station at North Platte, the hardiness of a number of more valuable timber trees will be tested and the advantages of wide and narrow spacing determined.

On the Saginaw Forest Farm, at Ann Arbor, Mich., the planting of 1-year-old chestnut seedlings will be contrasted with the success of planting nuts in seed spots. White pine and red oak plantations, 6 acres each, will be made to test different spacings, sowing, fall and spring planting, the effect of planting on plowed and unplowed ground, and the effect of cultivation. These 6-acre blocks will later be used as a basis for experiments in thinning.

At Higgins Lake the Michigan forestry commission will test various methods of nursery practice and planting. They will also record, for comparison, the cost of planting several species, when planting crews are organized differently and the trees planted in different ways.

At Berea College, Kentucky, and at the Mississippi Agricultural Experiment Station, the growing and planting of several species are being carried on to determine the best methods of reforesting waste lands. Special attention will be paid to the growing of hickory at these stations.

At Saranac Inn, the New York forest, fish, and game commission is cooperating with the Service in studying the best methods of growing conifers for planting in the East. One phase of this work is the trial of introduced species. Small quantities of Seed of *Pinus cembra*, *Picea ajanensis*, *P. obovata*, *Abies sibirica*, *Larix dahurica*, and other native Siberian trees will be sown this spring.

OFFICE OF SILVICS.

Books for Supervisors' Officers—

The first installment of books for the field libraries which are being established in the offices of forest supervisors has been forwarded to these officers. This installment consists of fourteen volumes of Government publications, as follows:

Eight bound volumes of Forest Service publications.

Diseases of the Horse; Bureau of Animal Industry, U. S. Department of Agriculture.

Diseases of Cattle; Bureau of Animal Industry, U. S. Department of Agriculture.

Manual for Army Cooks; Subsistence Department, U. S. War Department.

Pack Transportation; U. S. War Department.

Manual of Surveying Instructions; U. S. General Land Office.

Miscellaneous Public Land Laws and Regulations; U. S. General Land Office.

Besides these a set of general works on forestry is to be purchased for each supervisor's office. Several of these books have already been received by the Service library, and are being prepared for transmittal to the field. Members of the Service are requested to submit to the librarian any suggestions as to desirable books for this purpose.

The Fungus *Trametes pini*—

Specimens of a fungus found by K. W. Woodward on living trees of western white pine and western larch in the Lewis and Clark National Forest prove to be *Trametes pini*. This fungus, which attacks nearly all the commercial conifers of the United States and Europe, is more destructive to western white pine than to larch, and is especially destructive to mature and overmature timber. The spores enter most trees through wounds in the top, but in the western white pine they enter near the base of the trunk. The fungus spreads

rapidly in the heartwood, with the grain, above and below the point of infection. The wood first becomes dark brown in color, and eventually white spots appear, which increase in size until they fill the whole wood with a thin white felt of mycelium. In trees like larch, with a distinct resinous summerwood, the fungus works in the springwood first, so that the summerwood becomes separated in annual layers. When the internal decay has reached an advanced stage, the fungus produces its fruiting bodies. These are brown "conks" or "punks," which bear spores annually and sometimes attain an age of 50 years. They do not appear on down timber.

In order to prevent the spread of fungus diseases in the National Forests all merchantable infested timber should be marked for cutting, and efforts should be made to secure the removal of badly decayed trees by "free use."

The exploitation of overmature timber and of trees that have been injured will also lessen the risk of loss from this source.

Silvical Reports—

Through the silvical reports of technical assistants the Forest Service is now supplied with more detailed information upon silvical conditions in thirty of the National Forests than has hitherto been obtainable. Although the reports were prepared on short notice, they contain many valuable data, which have been copied and filed by silvical topics in the Section of Compilation. The information thus gained will be used in compiling silvical descriptions of species to be published in separate leaflets. It is also the intention to publish later a set of leaflets descriptive of the forest conditions prevailing in individual National Forests.

Reproduction on Cut-Over Land—

The Office of Silvics is about to undertake a study of logged-over areas. The yellow pine and lodgepole pine types will probably be taken up first; and a number of the older cuttings will be studied in order to determine what methods of cutting are best adapted to secure successful reproduction and make the forests as productive as possible.

BRANCH OF PRODUCTS UTILIZATION.

OFFICE OF WOOD.

Timber Tests—

For the past year the Yale timber-testing station of the Forest Service has been carrying on experiments to determine the effect of different methods of drying upon the strength of wood. It has been decided to include in this investigation methods of drying which involve high temperatures and air at high pressure, the pressure being used to prevent the water in the wood from reaching its boiling point.

Statistics of Forest Products—

The statistics of forest products for the calendar year of 1906, which the Forest Service and the Bureau of the Census have been collecting since January 1, are nearly complete and are being tabulated and compiled. The principal item is, of course, sawed lumber, but in addition to this a census has been

taken to determine the annual requirements made upon the forest for telegraph, telephone, electric light, and trolley poles, cross-ties, pulpwood, cooperage stock, veneer stock, tan bark, and wood used for distillation.

Announcement of the total quantity of wood used in each industry will be made public as soon as the tabulation is completed. The totals for lumber will be shown by States. The final figures upon the lumber production of the United States will be announced at the next meeting of the National Lumber Manufacturers' Association at the Jamestown Exposition, May 28. On the same date a preliminary bulletin summarizing the results will be placed in the hands of the press.

Reports have been obtained from a much larger number of manufacturers of lumber than last year, and the statistics will be correspondingly more accurate and complete. Immediately following the compilation will begin the preparation of detailed reports for each industry. It is expected that the manuscripts will all be ready for the printer by July 1, 1907.

Map Notes—

The establishment of the new inspection districts has aroused a demand for classification maps for the files of the inspectors, and six colorists have been employed temporarily on the drafting force for the purpose of pushing forward the work. The best base maps available at present will be used, and any which are not satisfactory will be replaced later when better maps are obtainable.

A scheme of classification has been adopted for use on boundary diagrams, and in the future the plats will show what the changes made by the proclamation consist of in addition to showing the boundary established.

Centralization Timber-Test Computations—

The coordination of the timber-test work through the establishment of a central office in Washington with complete files of data will be still further carried out by having all the test results forwarded to Washington for working up in the Computing Section. The scheme is for each laboratory to send in its data once or twice a week for prompt calculation. The result will be that those in charge of tests will be relieved of the labor of routine calculating and always have the results of their tests available to guide them in directing their work.

Wood Uses—

Arrangements are being completed to make a study of the tanbark oak of California. The work is to be done in cooperation with some of the leading lumber companies and with the Office of Silvics. The purposes of the study will be to obtain an estimate of the stand and to determine the best methods of handling the timber and the uses for which it is most suitable.

At present a considerable quantity of this timber is cut for bark. The trees are stripped and the wood is often left in the forest to decay.

Accessions to the Library—Compiled by the Librarian.

Manuals of Forestry.

Handbuch der Forstwissenschaft (Handbook of forestry);
C. J. T. Lorey. Ed. 2, 1903. 4 vol. Illus. H. Laupp,
Tübingen.

Manual of forestry, vol. 4; W. Schlich. 2d ed., 1907. Brad-
bury, Agnew & Co., London.

Forest Botany.

Familiar trees; G. S. Boulger. New ed., ser. 1, 1906. 160 p.
Illus. Cassell & Co., London.

Forest Geography.

Distribution and adaptation of the vegetation of Texas; W. L.
Bray. 1905. 108 p. Illus. Bulletin 82 of the Uni-
versity of Texas, Austin.

Silvics.

Rainfall.

Les forêts et les pluies (Forests and rainfall); E. Henry.
1906. 23 p. J. Castenet, Bergerac.

Historical.

L'idée forestière dans l'histoire (The forestry idea in his-
tory); L. F. Tessier. 1905. 28 p. L. Laveur, Paris.

Educational.

Ausbildung und Prüfung von Privatforstbeamten in Deutsch-
land (Education and examination of private forest offi-
cers in Germany); M. Lincke. 1906. 180 p. J. Neu-
mann, Neudamm. 2.40 M.

Classified list of publications available for distribution April
20, 1907; the Forest Service. 4 p.

Forest Management.

Planting.

Rubber planting in Mexico and Central America; P. Olsson-
Seffer. 1907. 31 p. From Agricultural Bulletin of
the Straits and Federated Malay States, Singapore,
January, 1907.

Circular 96, Arbor day; the Forest Service. 1907. 4 p.
Instructions to forest officers in reserve planting; the Forest
Service. 1907. 6 p.

Cultural.

Dänische Geräte zur Bodenbearbeitung in Buchensamenschlä-
gen (Danish implements for cultivating the soil in re-
generation cuttings of beech); Dr. Metzger. 1906.
32 p. Illus. Deutsche Landwirtschafts-Gesellschaft,
Berlin.

Pictorial practical tree and shrub culture; W. P. Wright and
W. Dallimore. 1905. 152 p. Illus. Cassell & Co.,
London.

Improvement of the wood lot; H. D. House. 1907. 14 p.
Illus. Bulletin 129 of the South Carolina agricultural
experiment station, Columbia, S. C.

Organization and Administration.

Field program for April, 1907; the Forest Service. 35 p.

Hawaii—Board of commissioners of agriculture and forestry.
Report for 1906. 1907. 212 p. Illus. Honolulu.

India—Madras presidency—Forest department. Annual ad-
ministration report for 1905–1906. 1906. 180 p.
Madras.

National Forests.

Forest reserves; speech in the United States Senate; C. M.
Depew. 1907. 12 p. Washington.

The National Forest Service; speech in the United States Sen-
ate; Albert J. Beveridge. 1907. 33 p. Washington.

Utilization.

Timbers of western Australia suitable for railways, engineering works, and constructional purposes generally. 1906. 36 p. Illus. Government of Western Australia, Perth.

The exact cost of lumber, a problem solved; C. Wedderin. 1907. 22 p. St. Louis Lumberman, St. Louis. 50 cents.

Technology.

Western Australian timber tests, 1906. The physical characteristics of the hardwoods of Western Australia; G. A. Julius. 1906. 36 p. Illus. Government of Western Australia, Perth.

Industrial and scientific aspects of the pine and its products; C. H. Herty. 1907. 8 p. From Chemical Engineer, March, 1907.

Forest Laws.

Protection of woods against fires; chapter 91, revised statutes, 1900, as amended by chapter 1, acts 1903-4; Nova Scotia—Legislature. 12 p. Halifax.

Forest Enemies and Friends.

Insects.

L'hylésine polygraphe et les épicéas de Lorraine (Polygraphus poligraphus and the spruces of Lorraine); E. Henry. 8 p. Impr., Berger-Levrault et Cie, Nancy.

Birds.

Useful birds and their protection; E. H. Forbush. 1907. 437 p. Illus. Massachusetts State board of agriculture, Boston. Contains a chapter on the utility of birds in woodlands.

Periodicals.

Articles of Special Interest.

American Lumberman, April 20, 1907.—Retailers and advanced prices of lumber. p. 30; Meeting of the Maine forestry commission. p. 38; Log scaling systems in Maine. p. 39; Perfection in the manufacture of Mississippi longleaf pine. p. 43.

Packages, April, 1907.—New pulp board box. p. 27; New pulp orange box. p. 28.

Lumber World, April 15, 1907.—The scarcity of hardwoods. p. 7; Where economy is practiced. p. 8.

Lumber Trade Journal—*New Orleans*, April 15, 1907.—The massacre of the trees. p. 11.

St. Louis Lumberman, April 15, 1907.—Utilization of wood waste by distillation (continued article). p. 66; Concerning American Forestry (continued article). p. 68; Prices of lumber as compared with farm products, hardware, etc. p. 72.

American Lumberman, April 13, 1907.—Maine forestry association is growing. p. 37; Estimating standing timber. p. 39.

Railway and Engineering Review, April 20, 1907.—Records of treated ties, A., T. & S. F. Ry. p. 330.

Barrel and Box, April, 1907.—Cost of timbering operations. p. 44.

Mississippi Valley Lumberman, April 12, 1907.—The cost of putting lumber on the market. p. 20.

Canada Lumberman, April, 1907.—Characteristics of timber. p. 18.

Hardwood Record, April 10, 1907.—American forest trees; Coffee tree. p. 17.

Mississippi Valley Lumberman, April 5, 1907.—About present lumber prices. p. 36.

Periodicals—Continued.

Articles of Special Interest—Continued.

- St. Louis Lumberman*, April 1, 1907.—State forestry association of Maine. p. 83.
- American Lumberman*, March 30, 1907.—A graphic story of the Frost-Trigg interests in Louisiana, Arkansas, and Texas. p. 51-114.
- American Lumberman*, April 6, 1907.—Secretary Rhodes explains elemental factors in lumber prices. p. 29.
- Paper Mill and Wood Pulp News*, March 30, 1907.—Michigan forestry association. p. 22.
- Hardwood Record*, March 25, 1907.—American forest trees; Honey locust. p. 16.
- Wood Craft*, April, 1907.—Manufacture of steering wheels. p. 9; Brierwood abroad. p. 10.
- Southern Lumberman*, March 25, 1907.—On measuring lumber at Liverpool, England. p. 34.
- Lumber Trade Journal—New Orleans*, April 1, 1907.—Do lumbermen favor Appalachian park? p. 13; Prices of lumber periodically compared. p. 15.
- Lumber Review*, April, 1907.—Forestry in Vermont. p. 63.
- Railway Age*, March 29, 1907.—The railroad interest in the Forest Service. p. 529.
- New York Lumber Trade Journal*, April 1, 1907.—New Jersey engages State forester. p. 13.
- Lumber World*, April 1, 1907.—Purpose using deadened timber. p. 29.

 BRANCH OF GRAZING.

Cooperative Agreement—

An agreement has been entered into with the Board of Land Commissioners of the State of Utah for the management of timber cutting and grazing upon all State lands within the National Forests. The State reserves the right to sell coal and farming lands, but agrees not to sell or lease any other class of its lands during the term of the agreement. The Forest Service will assist the State in finding purchasers for its merchantable timber and will manage the cutting and removal of logs from all State lands within the National Forests. The State agrees that grazing on its lands shall be allowed only under permits issued by the Forest Service, and that it will pay its proportionate share of the administrative expenses on each National Forest by allowing the Forest Service to collect grazing fees from the State lands for the amount due. The surplus or net quota of grazing will then be sold by the State, and grazing permits for the number of stock allowed will be issued by the Forest Service upon presentation of certificates from the State Board of Land Commissioners. The effect of this agreement is to put all State lands within the National Forests of Utah under administration by the Forest Service, who will protect and manage them under its rules and regulations. This will greatly simplify the administration of the National Forests and without doubt will result in great benefit to the State.

Sheep Dipping Regulations—

The Bureau of Animal Industry will make a strong effort to eradicate the disease known as "scab" from the western ranges this summer, and the Forest Service will cooperate in carrying out the plans for this work on the National Forest ranges. All sheep which are to be grazed on the National Forests within the States of Colorado, Utah, Nevada, and Oregon, and the Territories of Arizona and New Mexico will be required to pass inspection, and their owners must present a certificate from the Bureau of Animal Industry before the stock will be allowed to enter upon the National Forest ranges. In cases where the sheep are already upon the National Forest ranges or where early dipping is impracticable, it will be within the discretion of the inspectors of the Bureau of Animal Industry to allow the stock to remain, upon an agreement signed by its owners to the effect that the sheep will be dipped after lambing and shearing.

A large force of inspectors is now in the field, and every effort will be made to carry on this work with as little inconvenience to the stockmen as possible; but such rules as are necessary to insure its success must be rigidly enforced. An efficient inspection and the dipping of all infected stock will result in great benefit to the sheep owners by improving the condition of their stock and increasing the future profits of their business. •

BRANCH OF OPERATION.

OFFICE OF ACCOUNTS.

Change of Fiscal Agent—

Mr. G. E. King, Fiscal Agent, having relieved Mr. James B. Adams, Special Fiscal Agent, all remittances should be made payable to the former.

Suspensions or Disallowances—Form 99—

Whenever a change is made on Form 99, due to suspensions or disallowances from a supervisor's account, a duplicate will be prepared and forwarded to the supervisor for his information, and the records of his office should be changed in accordance therewith.

Advance Payment Post-office Box Rent—

Under a recent decision of the Comptroller of the Treasury, prepayment of rent for a post-office box by an officer of the Government for official use is not required. (Comp. Dec., vol. 12, p. 68.) It is suggested that whenever payment in advance is demanded the attention of the postmaster be called to this decision.

Form 98 or 99 with All Accounts—

Attention is again called to the requirement that Form 98 or Form 99 must be attached to each Form 4 or Form A account submitted. Form 99 is required for all accounts incurred in the administration of the National Forests and Form 98 for expenses of forest investigations. The form covering an expense account or Form A voucher should in all cases be attached to the voucher.

That covering salary should be mailed to the Fiscal Agent in a separate envelope promptly at the close of each month, not before. Care should also be exercised that the Office titles of all projects and studies are given exactly as furnished by each Chief of Office. Failure to observe this will not only cause unnecessary work in the Office of Accounts, but will endanger the accuracy of the cost-keeping record. The projects to which transportation requests are to be charged should be reported on the back of the form accompanying reimbursement accounts. Calculations for salary reports are based on actual working days during the month, exclusive of Sundays and holidays. For instance, if there are twenty-five working days in a month, one twenty-fifth of the monthly salary should be charged for each day's work.

The cost-keeping record is of much importance to the Forest Service in general, and its efficiency depends almost wholly upon the care with which field men make these reports on Forms 98 and 99. It is expected that every member of the Service will cooperate to make this record as complete and accurate as possible.

Certification in Advance—

It has come to the notice of the Fiscal Agent that the certificates to Form A vouchers are in some instances signed by officers in charge before the signature of the claimant to the receipt is obtained. Officers in charge should under no circumstances certify to an account until the amount due has been entered and the receipt signed by the party to whom the money is due. They should carefully examine all vouchers before submitting them for settlement, to detect any irregularity in the charges or in the signature to the receipt. The importance of thorough familiarity with the Fiscal Regulations regarding the preparation of accounts can not be too strongly urged upon officers in charge.

Use of long Form A—

For purchase accounts of less than ten items the use of long Form A vouchers should be discontinued and the short forms be used instead. A supply of the short forms has been forwarded to all supervisors, and more can be secured upon requisition.

New Form 99—

A revision of Form 99 has been printed and a supply forwarded to forest officers. Full instructions regarding the distribution of expenditures among the new headings (comprising twelve instead of six projects) are printed on the back of each form. All salaries and expenses on account of Forests should be distributed under the new headings, according to these instructions.

Latest Area Figures—

A new area and location table was issued April 1, showing the total area on that date of National Forests in the United States, Alaska, and Porto Rico to be 147,948,685 acres. Since April 1 proclamations have been issued enlarging the following National Forests: Big Burros, Gallinas, and Lincoln, in New Mexico; Stony Creek, in California; and Manti and Beaver, in Utah. The following new National Forests have also been created: Toquima and Monitor, in Nevada, and Guadalupe and Sacramento, in New Mexico. The total estimated area of all National Forests in the United States, Alaska, and Porto Rico, up to and including April 27, is 150,255,045 acres.

OFFICE OF ORGANIZATION.

Clerks—

As the services of a clerk (stenographer and typewriter) are necessary in many of the offices of the Supervisors, the Civil Service Commission has consented to hold examinations for this position in the Western States having National Forests. These examinations will probably be held some time in May. If it becomes necessary to employ a clerk before civil-service eligibles are available, they may be temporarily employed or appointed.

Transfers of Rangers and Guards—

Officers in charge of more than one National Forest are allowed to transfer their Rangers and Guards from one Forest to another when the occasion demands, but the Forester should in every case be notified at once, so that the salary of the man may be charged to the National Forest on which he is really working. In the past some confusion has resulted from failure on the part of officers in charge to notify the Forester.

Marking Hatchets—

Upon the urgent recommendation of the expert lumberman, who insists that a long handle put into the marking hatchet makes it as effective an implement as the marking ax, it has been decided to buy no more marking axes. Those who have use for a marking ax are requested to try using a long-handled marking hatchet, and to report the fact if it is not thoroughly satisfactory.

The efforts of the Instrument Committee to standardize the field equipment will be greatly helped if all who have had experience with the marking ax will report their opinions of it.

Engineering Notes—

Mr. W. E. Herring, Constructing Engineer, has returned from a two weeks' trip to Salt Lake City and Denver, where he was in consultation with three leading telephone companies in that section of the country in regard to contracts for special rates over their lines, flat rates for instruments at the various exchanges, and other concessions of a like nature.

As rapidly as the detailed estimates for permanent improvements are received from the supervisors they are being checked over, and the construction of the work is being authorized as necessity warrants. Numerous requests have been received from the supervisors, but in many cases they have not been in detail, and for this reason it has been necessary to delay action on their requests until detailed estimates have been returned. It is expected that within the next two weeks several hundred miles of telephone line will be authorized, and the work will be started at the earliest possible moment.

Use of Compasses—

From the number of pocket sight compasses turned in as useless, with nothing the matter with them excepted a shifted dial, it is evident that forest officers in general are not aware that the pocket sight compasses with silvered dials are take-down, interchangeable affairs whose parts can be assembled and disassembled without need for any tools besides a knife.

The dials are purposely left unfastened to the bottom of the case so that they can be adjusted when necessary to any magnetic variation.

All that is necessary to open one of these compasses is to insert the point of a knife blade under the ring which holds the crystal in and spring the ring out. The band ring on which the crystal rests can be raised or lifted out entirely if the dial is to be shifted or removed.

This take-down feature of these compasses is of considerable value should water or dust get into them. Also in case accidents should happen to all the compasses in the party enough usable parts might be assembled to make a few workable ones.

If the needle acts sluggishly and it is possible that dirt is the cause, open the compass and scrape the pin on which the needle rests and turn about in the jewel a sharpened piece of soft wood.

Authorization for Advertising—

On January 14 the Comptroller of the Treasury rendered a decision to the Secretary of Agriculture which will make it possible to issue to officers in charge letters of authorization covering advertising. Officers in charge will be requested to submit the names of the papers in the vicinity of their National Forests in which they will be likely to advertise during the coming year, and upon the receipt of this list letters of authorization will be issued which will allow advertising without the trouble and delay of securing authority from the Washington office.

SERVICE ORDERS.

SERVICE ORDER 130.

Information to Field Men.

APRIL 12, 1907.

At present the field officers are largely left in ignorance of action taken in the Washington office which concerns their work, or are very tardily informed. It is of the greatest importance that they be informed in every single case with promptness and in detail. Important matters should be communicated by wire. They should receive without fail carbon copies of all letters involving action which directly or indirectly affects their work, and special notice in every case when carbon copies will not give full information. Close attention to this matter is absolutely essential to good administration.

GIFFORD PINCHOT, *Forester*.

SERVICE ORDER 131.

Distribution of Publications.

APRIL 15, 1907.

The Office of Publication is responsible to the Forester for formulating and executing the general policy of the Service in its use of publications. This involves decision as to the distribution which should be given each publication, direction of and responsibility for the plans under which the Service publications mailing lists are made up and maintained, and supervision of the general policy which covers the filling of requests for publications.

The routine operations in the maintenance and use of the publications mailing lists and in handling the correspondence and business involved in filling requests for publications are in the Office of Record.

GIFFORD PINCHOT, *Forester*.

SERVICE ORDER 133.

Unpublished Manuscripts and Reports.

APRIL 30, 1907.

There are a great many manuscripts on file in the various offices of the Service containing much valuable information which could be used to advantage by the members of the Service in carrying on further investigations or in writing up reports, but which are at present known to only a few. In order to make all the information possessed by the Service available, these manuscripts should be indexed in the library under the system followed with published works. For this reason all Offices are directed to furnish to the Librarian lists of the authors and titles of all reports of members and collaborators of the Service

which are now in their files, and of new ones as they are received. It will then be the duty of the Librarian, under the direction of the Chief of the Office of Silvics and with the cooperation of the Office which furnishes the report, to prepare an analytical index of the information contained except for matter confidential in character or pertaining merely to routine work. In this way reference to all the forest literature in the Service, whether published or unpublished, will be brought together in one index, and the work of members engaged in looking up special subjects will be greatly reduced.

GIFFORD PINCHOT, *Forester*.

SERVICE ORDER 134.

Use of the Badge.

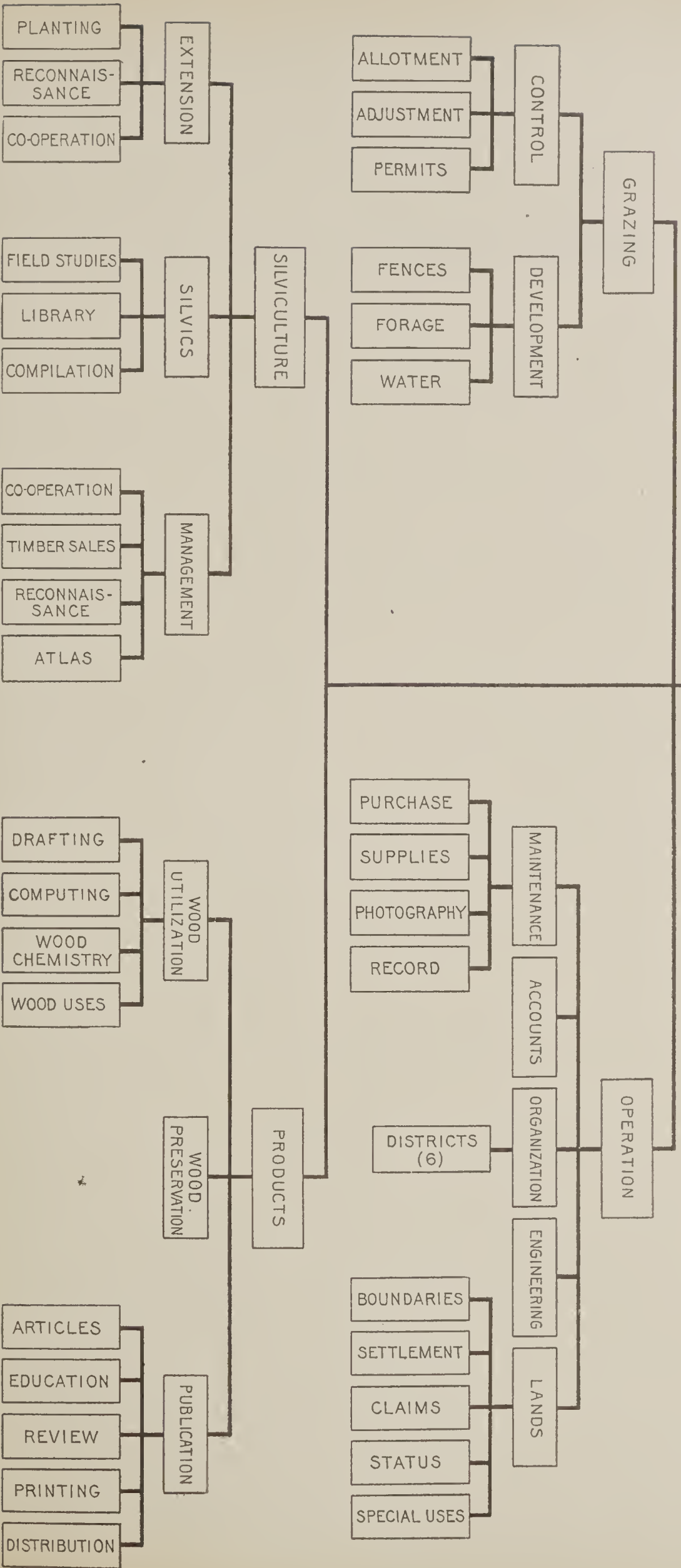
APRIL 30, 1907.

Hereafter the badge will be worn only by officers of the Washington office when on inspection or administrative duty on the National Forests, by Inspectors, and by Supervisors, Rangers, and Guards and other officers assigned to administrative duty under the Supervisors.

GIFFORD PINCHOT, *Forester*.

SERVICE ORDER 132, AMENDED.
APRIL 17, 1907.
This organization will be in effect on and after April 17, 1907.
GIFFORD PINCHOT, Forester.

FORESTER
ASSOCIATE FORESTER
LAW
INFORMATION
DENDROLOGY
INSPECTION



NATIONAL FOREST ORDERS.

NATIONAL FOREST ORDER 33.

(Supersedes Forest Reserve Order No. 7.)

APRIL 13, 1907.

Examination of Mining Claims.

To Forest Officers in Charge:

When it becomes necessary under the special instructions on page 21 of The Use Book to make a special examination and report upon a mineral land claim within a National Forest, the forest officer should observe the following provisions:

If active mining operations are being conducted on the claim and ore is being marketed and the general outlook indicates a bona fide mine, a close examination for mineral values or indications will not be necessary. The forest officer should, in such cases, report the facts generally after going through the mine.

Where the validity of the discovery is doubtful, a more careful examination should be made. It should be remembered that it is not necessary that the claim should be a paying mine. If valuable mineral has been found and the nature of its occurrence would justify exploitation or working of the ground for mineral, the discovery would be a legal and valid one.

To determine whether or not such a discovery has been made the forest officer should proceed as follows:

(a) In case of lode claims:

1. He should examine the dimensions of the outcropping of the vein or lode on the ground and note the general character of the rock in which the deposit is contained.

2. He should search for discovery shafts, pits, or tunnels which the owner has made in an effort to find or disclose the vein and ore. He should make notes of the appearance and extent of the vein or ore exposed in the excavations, and should particularly note whether there is a distinct deposit of valuable ore or minerals, or whether, for example, there is merely some mineral like iron pyrites distributed in slight amount throughout the rock of the claim.

3. He should measure the width of the vein or filling between the rock walls or the thickness of the mineralized zone of rock exposed in the excavations, and should observe the dip—that is, the angle of inclination downward from the horizontal—of the vein or mineralized rock, as well as the strike or course of the vein, noting the latter as N., NW., etc.

4. He should take a sample of each important grade of ore found in the excavation or in any vein on the claim and observe the proportion of each kind of ore. He should then select a sample consisting of a number of pieces which, in his opinion, represents the average value of the vein or mineralized rock,

being careful that these samples are taken from the vein that is being opened up, and have not been brought from elsewhere. These samples need not weigh more than 1 to 3 pounds each; they should be carefully wrapped and the wrapper labeled with the name and location of the claim, the name and address of the claimant and of the officer examining the claim, the date of the examination, and each package should be numbered, the number being also entered in the field notebook.

5. Notes should be made at once and the samples should be referred to in the notes by number, description, color, and name, if known, of the rock containing the mineral. This will assist the officer in making his report.

6. The samples of ore after being wrapped and the package after being labeled should be stored, if possible, under lock and key.

7. Immediately upon being notified that a hearing has been ordered upon the claim by the Commissioner of the General Land Office, the Supervisor should send the samples by express, charges prepaid, to the assayer of the mint at Denver, Colo., Deadwood, S. Dak., Carson City, Nev., or Seattle, Wash., whichever city may be most easily accessible to his Forest, or to such other address as may be supplied hereafter. The charge for expressage, supported by the proper subvoucher, should be submitted in the Supervisor's next expense account, charging it to the allotment for protection. The Supervisor should inform the assayer by letter of the shipment, give the same description of the samples used upon the label, request him to make the assay and give an assay certificate for the use of the Forest Service, and inform him, if possible, on what date the certificate will be used.

(b) In placer claims:

The forest officer should search for the discovery shaft, pit, or tunnel which the owner may have made for discovery of minerals; pan some of the dirt in each of them, and record the results. Several pannings should be made in each excavation.

He should endeavor to discover the claimed nature of the alleged placer deposit and should, if possible, verify or dispute this theory by his report, giving his reasons.

(c) In both classes of claims:

1. The general character of the country should be stated and the distance from paying mines ascertained. The entire tract embraced in the claim should be examined for mineral indications.

2. The method of possible work of the claim, as well as water power and transportation facilities, should be ascertained when possible.

3. In selecting the dirt for panning or ore for samples the officer should rely upon his own judgment, considering, but not necessarily following, the suggestion of the claimant. Special care should be taken to avoid imposition or salting.

4. Answers should be given, whenever possible, to each question on Form 654. It contains spaces on which the information secured under this order may generally be reported, but if more space is needed an additional sheet may be used and attached to the form. The answer to question 30 of the form should show whether the claim is used for any purpose other than mining and in what manner. Reports should be made separately on each claim of a group, and when work on one claim is alleged to develop others the extent and plan of development with relation to each should be shown.

5. Pans, hammers, picks, and crowbars are considered forest equipment where needed under this order and may be purchased.

6. If the field force on the Forest have not the requisite scientific and practical knowledge, mineral experts will be sent to make a special examination in cases

which are believed to be fraudulent, especially if they involve large areas of land, and seriously jeopardize National Forest interests or prevent the proper management and protection of the Forests.

7. Definite evidence by qualified witnesses is necessary to sustain charges against any claim that is considered fraudulent.

8. Good judgment, care, and initiative on the part of the forest officer to add to or vary, for proper reason to be explained by him, the nature of the report will add greatly to its value and assist materially in the protection of legitimate mining and of the interests of the United States by preventing fraudulent appropriation of nonmineral land under the guise of compliance with the mineral-land laws.

GIFFORD PINCHOT, *Forester*.

NATIONAL FOREST ORDER 34.

Special Use Permits upon Land Applied for under the Act of June 11, 1906.

APRIL 13, 1907.

To Forest Officers in Charge:

Squatters who settled on National Forest land before its withdrawal and are awaiting survey to make entry, have the same rights to occupy and enjoy their holdings under Regulation 1 (The Use Book, p. 20) as homestead entrymen, and may at their option await survey or apply for the examination of their lands under the act of June 11, 1906, with a view to opening them to homestead entry.

Persons who settled in trespass before January 1, 1906, and have not abandoned their claims, may, if qualified, take advantage of the act of June 11, 1906, and in the meantime may occupy and enjoy their holdings without permit. Other applicants under the act of June 11, 1906, who appear to have the preference right of entry under that act, may secure, without charge, a permit for the agricultural use of so much of the land applied for as, in the opinion of the supervisor, is chiefly valuable for agriculture, provided that the land is not adversely claimed under settlement made before its withdrawal, or after its withdrawal and before January 1, 1906. Land covered with a stand of merchantable timber should not be considered chiefly valuable for agriculture under this paragraph.

The Forester will send to the Supervisor of each Forest monthly lists of applications under the act of June 11, 1906, in such form as to show who appears to have the preference right of entry. Upon receipt of such lists the Supervisor should notify the applicant appearing to have the preference right of entry, if the land is considered to be chiefly valuable for agriculture and is not adversely claimed under settlement as above defined, that upon request a special permit will be granted to him without charge to occupy and use the land for agricultural purposes. Supervisors who have hitherto received notices of applications should immediately take this action without waiting for the first monthly list.

Upon the receipt of such request please prepare a special-privilege application on Form S32 and send it to the applicant for signature and return to you for action in the usual manner under the special-privilege regulations.

Please incorporate in each permit the following paragraph:

In the examination of the land under the act of June 11, 1906, to determine its agricultural character this permit shall not be considered; neither shall it be construed to give the permittee any preference right of entry under that act. This permit shall terminate when the land is opened to entry under that

act; but if it is shown that the permittee has not the preference right of entry, the listing of the land for opening to entry will be deferred by the Secretary of Agriculture to protect growing crops.

Applications for listing will not be affected by this order.

GIFFORD PINCHOT, *Forester*.

NATIONAL FOREST ORDER 35.

Disposal of Timber on Valid Mining and Other Land Claims.

APRIL 30, 1907.

To Forest Officers in Charge:

The question whether the Government has or has not the right to sell timber from a mining or other valid land claim upon which final proof has not yet been made has never been settled in the courts. When a claimant is actually occupying and developing his claim, the timber should not be disposed of by the Forest Service. If, however, any claimant is not actively using his claim, forest officers should not hesitate to allow, either under sale or "free use," the cutting and removal of dead, down, diseased, or insect-infested timber, especially when they consider such timber a danger to the Forest. If the danger is great, it should be reported to the Forester even though the claim is actively used.

No attempt should be made to sell the sound standing green timber upon unperfected valid mining or other claims, whether they are being actively used or not.

The Forest Service has the undoubted right to sell any timber upon a land claim to the rightful claimant for any use whatever. This is so for two reasons: (1) On the supposition that the legal title to the timber remains in the Government until patent issues; (2) because nobody except the claimant has the right to object to such a sale or question its legality, and by the purchase he waives all objections. For the same reasons such a sale may be made to a third party, with the consent of the rightful claimant, which should be in writing and filed with the other papers in the case.

NATIONAL FOREST ORDER 36.

Extension of Time in Classes A and B Timber Sales.

APRIL 30, 1907.

To Forest Officers in Charge:

Supervisors may, without application to the Forester, extend the time allowed for the cutting and removal of timber in timber sales of Class A and Class B. Extensions of time should be granted only to prevent hardship in cases where unavoidable delay has occurred, and the Forester should be notified at once in each case.

GIFFORD PINCHOT, *Forester*.

NATIONAL FOREST ORDER 37.

Timber Trespass on Land Afterwards Included in a National Forest.

(Amends National Forest Order 29.)

APRIL 30, 1907.

The Commissioner of the General Land Office has instructed Special Agents to transfer to Forest Supervisors all cases of unlawful timber cutting on lands afterwards included in a National Forest. The Supervisor will therefore report on Form 856 all cases so transferred, and also other recent cases of such unlawful cutting, whether the timber was removed outside the boundary of the Forest or to patented land before the Forest was created, or not, and such timber may be seized wherever found. If it was so removed, the fact should be stated in the report.

It is not the duty of the Supervisor, however, to engage in active investigation and prosecution of very old cases, unless in his judgment such prosecution is necessary for the future protection of the National Forests.

GIFFORD PINCHOT, *Forester*.

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JUN 1 1907

U. S. Department of Agriculture

Issued June 1, 1907.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR JUNE, 1907.

The program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Principal Examiner.

HERBERT A. SMITH, Editor.

GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District No. 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, Chief Inspector, Missoula, Mont.

P. G. REDINGTON, Forest Inspector, Missoula, Mont.

F. A. SILCOX, Forest Inspector, Thompson Falls, Mont.

GEO. H. CECIL, Forest Inspector, Miles City, Mont.

C. H. ADAMS, Grazing Inspector, Missoula, Mont.

Inspection District No. 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, Kansas, Southeastern Montana, and Southeastern Utah.

SMITH RILEY, Chief Inspector, Denver, Colo.

L. F. KNEIPP, Forest Inspector, Denver, Colo.

R. P. IMES, Forest Inspector, Denver, Colo.

T. D. WOODBURY, Forest Inspector, Denver, Colo.

Inspection District No. 3.—Arizona, New Mexico, and Oklahoma.

D. D. BRONSON, Chief Inspector, Albuquerque, N. Mex.

T. S. WOOLSEY, Jr., Forest Inspector, Carlsbad, N. Mex.

W. R. MATTOON, Planting Inspector, Albuquerque, N. Mex.

J. K. CAMPBELL, Grazing Inspector, Washington, D. C.

Inspection District No. 4.—Utah, Southern Idaho, Western Wyoming, Eastern Nevada, and Northern Arizona.

R. E. BENEDICT, Chief Inspector, Salt Lake City, Utah.

F. W. REED, Forest Inspector, Salt Lake City, Utah.

J. M. FETHEROLF, Planting Inspector, Salt Lake City, Utah.

W. C. CLOS, Grazing Inspector, Salt Lake City, Utah.

Inspection District No. 5.—California and Western Nevada.

F. E. OLMSTED, Chief Inspector, San Francisco, Cal.

COERT DU BOIS, Forest Inspector, San Francisco, Cal.

J. H. HATTON, Forest Inspector, San Francisco, Cal.

WM. C. HODGE, Jr., Forest Inspector, San Francisco, Cal.

G. W. PEAVY, Planting Inspector, San Francisco, Cal.

Inspection District No. 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, Chief Inspector, Tacoma, Wash.

M. L. ERICKSON, Forest Inspector, Lakeview, Oreg.

W. H. B. KENT, Forest Inspector, Tacoma, Wash.

F. E. AMES, Forest Inspector, Eugene, Oregon.

WM. L. HALL, *Assistant Forester*, in the Office of the Forester; in charge White Mountain and Appalachian Investigation; Assistant, W. W. ASHE.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman and Special Inspector*, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. CON, Assistant Forester, in Charge.

OFFICE OF MANAGEMENT.

E. E. CARTER, Chief.

W. G. WEIGLE, Assistant Chief.

Timber Sales, E. H. CLAPP, in Charge.

G. M. HOMANS, Assistant.

P. T. HARRIS, Forest Assistant, Washington, D. C.

R. F. HAMMATT, Forest Assistant, Washington, D. C. Detailed from Organization.

Assignments for work on important sales under the direction of supervisors:

W. T. ANDREWS, Assistant Lumberman, Boise, Idaho.

J. S. BAIRD, Assistant Lumberman, Cass Lake, Minn.

Assignments for work on important sales under the direction of supervisors—Cont'd.

G. P. BARD, Forest Student, Flagstaff, Ariz.
 M. BURNS, Assistant Lumberman, Cass Lake, Minn.
 GEO. L. COTT, Assistant Lumberman, Kalispell, Mont.
 W. G. DURBIN, Agent, Quincy, Cal.
 I. F. ELDREDGE, Forest Assistant, Northfork, Cal.
 GEORGE P. GREGG, Assistant Lumberman, Keystone, Wyo.
 C. A. GALARNEAU, Forest Assistant, Sisson, Cal.
 E. M. HAMILTON, Assistant Lumberman, Deadwood, S. Dak.
 J. P. HUGHES, Assistant Lumberman, Carson, Wash.
 J. E. KEACH, Forest Assistant, Saratoga, Wyo.
 W. E. LA FOUNTAIN, Assistant Lumberman, Northfork, Cal.
 W. R. MCKINNON, Assistant Lumberman, Cass Lake, Minn.
 S. L. MOORE, Forest Assistant, Kalispell, Mont.
 A. J. NORTON, Assistant Lumberman, Denver, Colo.
 H. C. NEEL, Forest Assistant, Deadwood, S. Dak.
 R. G. POND, Forest Student, Hot Springs, Cal.
 A. B. RECKNAGEL, Forest Assistant, Flagstaff, Ariz.
 G. E. SAWYER, Forest Student, Sumas, Wash.
 F. X. SALZMAN, Assistant Lumberman, Cody, Wyo.
 R. Y. STUART, Forest Assistant, Wapiti, Wyo.
 W. S. UHLER, Assistant Lumberman, Anaconda, Mont.
 J. D. WARNER, Forest Assistant, Boise, Idaho.
 L. L. WHITE, Forest Assistant, Weiser, Idaho.
 K. W. WOODWARD, Assistant Forest Inspector, Kalispell, Mont.
 I. T. WORTHLEY, Forest Assistant, Delta, Colo.

Cooperation, J. S. HOLMES, Acting in Charge.

PROJECTS.

Delaware—

Study of forest conditions in cooperation with the State—W. D. STERRETT, Agricultural Experiment Station, Newark.

Eastern States—

Examination of woodlots and timber tracts—WESLEY BRADFELD, Washington, D. C.

Kentucky—

Study of forest conditions in cooperation with the State—J. S. HOLMES, Lexington.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Mexico—

Supervision of cutting, Fort Wingate Military Reservation, in cooperation with the War Department—W. G. WEIGLE and J. G. PETERS, Fort Wingate, N. Mex.

Northeastern States—

Examination of woodlots and timber tracts—BENTON MACKAYE, 1524 Cambridge street, Cambridge, Mass.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Jr., Odanah.

Reconnaissance, S. J. RECORD, in Charge.

Western States—

Preliminary mill scale study of western yellow pine—L. MARGOLIN, Flagstaff, Ariz.

Forest Atlas, F. G. PLUMMER, in Charge.

OFFICE OF SILVICS.**RAPHAEL ZON, Chief.****Field Studies**, RAPHAEL ZON, in Charge.**Library**, H. E. STOCKBRIDGE, in Charge.**Compilation**, E. H. EROTHINGHAM, in Charge.**PROJECTS.****Colorado—**

Location and estimate of timber infested by the Black Hills beetle, the Englemann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins in charge)—W. D. EDMONSTON, Larkspur, Colo.

Pennsylvania and Virginia—

Study of second growth yellow poplar in Northern Virginia and Eastern Pennsylvania—W. W. ASHE, Washington, D. C.

Northeastern States—

Study of the hickories—A. T. BOISEN, Washington, D. C.

OFFICE OF EXTENSION.**SAMUEL N. SPRING, Chief.****Planting**, L. C. MILLER, in Charge.

Assignments for work in nursery and planting under the direction of supervisors:

A. E. OMAN, Forest Assistant, Missoula, Mont.

F. J. PHILLIPS, Forest Assistant, Capitan, N. Mex.

W. D. HAYES, Assistant Forest Expert, Fort Bayard, N. Mex.

Reconnaissance, W. H. VON BAYER, in Charge.

PROJECTS.

Study of forest planting in irrigation projects in Southern Idaho—E. O. SIECKE, Pocatello, Idaho.

Study of forest planting in Ohio and Indiana—A. S. PECK, Forest Assistant, Southern Hotel, Columbus, Ohio.

Cooperation, S. B. DETWILER, in Charge.

PROJECTS.**California—**

Experimental planting—G. B. LULL, Collaborator, Sacramento, Cal.

Indiana—

Examination of forest plantations established in accordance with plans prepared by the Forest Service—S. B. DETWILER, Indianapolis, Ind.

Hawaii—

Experimental planting—R. S. HOSMER, Collaborator, Honolulu.

BRANCH OF GRAZING.

A. F. POTTER, Assistant Forester, in Charge (in the Field).

JOHN D. LELAND, Acting in Charge.

OFFICE OF CONTROL.**A. F. POTTER, Chief.****Allotment**, L. F. KNEIPP.**Adjustment**, JOHN D. LELAND.**Permits**, ANNA P. KOSCHWITZ.

OFFICE OF DEVELOPMENT.**A. F. POTTER, Chief.****Fences, C. H. ADAMS, Missoula, Mont.****Forage, W. C. CLOS, Salt Lake City, Utah.****Water, J. K. CAMPBELL, Washington, D. C.****BRANCH OF PRODUCTS.****R. S. KELLOGG, Acting in Charge.****OFFICE OF WOOD UTILIZATION.****R. S. KELLOGG, Chief.****Computing, E. A. ZIEGLER.****Drafting, C. A. KOLB.****Wood Chemistry, A. L. DEAN.****Wood Uses, M. CLINE.****PROJECTS.****California—**

Tests of the strength of eucalyptus wood, in cooperation with the State and the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Study of the uses of tanbark oak—H. S. SACKETT, Berkeley.

Study of the uses of National-Forest woods—H. B. HOLROYD, Fresno, Cal.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, FREDERICK DUNLAP and CORNELIUS BARRY.

Experiments in wood preservatives—A. L. DEAN, Sheffield Scientific School, Yale University, New Haven; assistants, ERNEST BATEMAN and D. C. PARMELEE.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN and ROLF THELEN.

Massachusetts—

Studies of the value of the various woods for pulp—A. D. LITTLE, 93 Broad street, Boston, and H. S. BRISTOL, 74 Pinckney street, Boston.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene.

Washington—

Tests of western hemlock and National-Forest woods, in cooperation with the University of Washington—O. P. GOSS, University Station, Seattle.

General Studies—

Washington office, timber tests—H. S. BETTS, in charge; assistant, T. W. VENNEMANN, Washington, D. C.

Collection of statistics of forest products for the year 1906, in cooperation with the Bureau of the Census—H. M. HALE, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of lumber prices—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—W. C. GEER, New Haven, Conn.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief.

PROJECTS.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistant, O. T. SWAN.

Montana—

The laying of an experimental track with western tamarack and Douglas fir to test the value of seasoning and treating, and of various devices for reducing the mechanical wear of the rails; in cooperation with the Northern Pacific Railway Company—H. B. EASTMAN, McGowan Hotel, Plains; assistant, W. H. KEMPFER.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

General Studies—

Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.

Study of creosote production—C. L. HILL, Washington, D. C.

Preparation of report on the experimental treatment of chestnut telephone poles—H. F. WEISS, Washington, D. C.

Preparation of report on the experimental treatment of loblolly pine cross-arms—W. F. SHERFESEE, Washington, D. C.

Correlation of data on the preservative treatment of American and foreign woods—M. C. JENSEN, Washington, D. C.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief.

Articles, T. CLEVELAND, Jr.

Review, FINDLEY BURNS.

Printing, QUINCY R. CRAFT.

Distribution, BRISTOW ADAMS.

Exhibit of the Forest Service at the Ter-Centennial Exposition, Norfolk, Va.—ENOS A. MILLS, care Ter-Centennial Exposition.

PUBLICATIONS IN MAY.

Forest Planting Leaflets (reprinted as circulars):

82. Hardy Catalpa.	89. Tamarack.
83. Russian Mulberry.	90. Osage Orange.
84. White Ash.	91. Coffeetree.
85. Slippery Elm.	92. Green Ash.
86. Boxelder.	93. Yellow Poplar.
87. White Willow.	94. Black Cherry.
88. Black Walnut.	95. Sugar Maple.

Special Circular.—Germination of Pine Seed.

Forest Service Order 23. Part 4.—Surveys for Ranger Stations.

BRANCH OF OPERATION.

JAMES B. ADAMS, Assistant Forester, in Charge.

OFFICE OF ACCOUNTS.

GEORGE E. KING, Fiscal Agent and Chief.

Disbursing, E. A. MELZAR.

Bookkeeping, O. H. TIBBOTT.

Receipts, M. R. LATIMER.

OFFICE OF MAINTENANCE.

HERMON C. METCALF, Chief.

Purchase, H. C. TOWERS.

Record, H. C. METCALF.

Supplies, A. M. SMITH.

Photography, A. G. VARELA.

OFFICE OF LANDS.

G. F. POLLOCK, Chief.

Special Uses, M. J. McVEAN.

Claims, F. L. HARVEY.

Agricultural Settlement, W. J. MANGAN.

Status, J. B. SATTERLEE.

Boundaries, A. C. RINGLAND.

R. W. AYRES, South Pasadena, Cal.

C. J. BUCK, Yreka, Cal.

JOHN W. FARMER, Flagstaff, Ariz.

C. W. FITZGERALD, Hotel Franklin, Deadwood, S. Dak.

J. D. GUTHRIE, Yreka, Cal.

LEE A. HARRIS, care E. T. ALLEN, Tacoma, Wash.

WM. C. HODGE, jr., San Francisco, Cal.

R. S. HOSMER, Honolulu, Hawaii.

PAUL D. KELLETER, Hotel Franklin, Deadwood, S. Dak.

W. J. MORRILL, care SMITH RILEY, Denver, Colo.

STANTON G. SMITH, Prescott, Ariz.

H. O. STABLER, 310 Custom-House, Portland, Oreg.

H. F. STUDLEY, Hotel Tacoma, Tacoma, Wash.

L. VON WERNSTEDT, Hotel Oregon, Portland, Oreg.

OFFICE OF ENGINEERING.

W. E. HERRING, Chief (in the Field).

STUART J. FLINTHAM, Washington, D. C.

J. H. CLARK, care R. E. BENEDICT, Salt Lake City, Utah.

GORDON EDSON, Huntley, Mont.

F. E. JOY, Sisson, Cal.

OFFICE OF ORGANIZATION.

CHAS. S. CHAPMAN, Chief.

CLYDE LEAVITT, Assitant Chief.

NATIONAL FORESTS.

DISTRICT 1.

PAGE S. BUNKER, Forest Supervisor.

IDAHO.

Bitter Root National Forest—F. A. FENN, Forest Supervisor, Kooskia.

Cœur d'Alene National Forest—RICHARD H. RUTLEDGE, Acting Forest Supervisor, Wallace; DORR SKEELS, Forest Assistant.

Palouse National Forest—RICHARD H. RUTLEDGE, Acting Forest Supervisor, Wallace; ROY HEADLEY, Deputy Forest Supervisor; DORR SKEELS, Forest Assistant.

Priest River National Forest—B. F. McCONNELL, Forest Supervisor, Priest River; R. L. FROMME, Forest Assistant.

MONTANA.

Big Belt National Forest—R. W. STUART, Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant.

Big Hole National Forest (North)—C. K. WYMAN, Acting Forest Supervisor, Dillon; ROBT. J. MOORE, Deputy Forest Supervisor.

Big Hole National Forest (South)—J. B. SEELY, Forest Supervisor, Sheridan.

Big Hole National Forest (Anaconda Division)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; W. W. WHITE, Forest Assistant.

Bitter Root National Forest (Montana Division)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant.

Cabinet National Forest (North)—D. G. KINNEY, Forest Supervisor, Libby.

Cabinet National Forest (South)—F. A. SILCOX, Acting Forest Supervisor, Thompson Falls.

Crazy Mountains National Forest—E. C. RUSSELL, Forest Supervisor, Livingston.

Elkhorn National Forest—R. W. STUART, Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant.

Gallatin National Forest—DAVID CONKLING, Forest Supervisor, Bozeman.

Helena National Forest—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant.

Hell Gate National Forest (east of Bitter Root Slope)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; W. W. WHITE, Forest Assistant.

Hell Gate National Forest (Bitter Root Slope)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant.

Highwood Mountains National Forest—JAMES G. THAIN, Forest Supervisor, Highwood.

Kootenai National Forest—D. G. KINNEY, Forest Supervisor, Libby.

Lewis and Clark National Forest (North)—F. N. HAINES, Forest Supervisor, Kalispell; WM. H. DAUGS, Deputy Forest Supervisor.

Lewis and Clark National Forest (South)—ARTHUR C. McCAIN, Acting Forest Supervisor, Kalispell.

Little Belt National Forest—IRA E. TODD, Forest Supervisor, Neihart.

Lolo National Forest—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant.

Madison National Forest—J. B. SEELY, Forest Supervisor, Sheridan.

Missoula National Forest—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant.

Otter National Forest—GEO. H. CECIL, Acting Forest Supervisor, Miles City.

Pryor Mountains National Forest—H. W. THURSTON, Acting Forest Supervisor, Cody, Wyo.

Snowy Mountains National Forest—IRA E. TODD, Forest Supervisor, Neihart.

Yellowstone National Forest (Absaroka Division)—E. C. RUSSELL, Forest Supervisor, Livingston.

WYOMING.

Big Horn National Forest—W. E. JACKSON, Forest Supervisor, Big Horn.

Yellowstone National Forest (Shoshone Division)—H. W. THURSTON, Acting Forest Supervisor, Cody.

DISTRICT 2.

THOMAS HOGAN, Forest Supervisor.

COLORADO.

Battlement Mesa National Forest—DAVID ANDERSON, Forest Supervisor, Collbran.

Cochetopa National Forest—EUGENE WILLIAMS, Forest Supervisor, Moffat.

Fruita National Forest—H. K. PORTER, Forest Supervisor, Delta.

Gunnison National Forest—WM. R. KREUTZER, Forest Supervisor, Gunnison.

Holy Cross National Forest—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; F. H. MORRILL, Forest Assistant.

Las Animas National Forest—D. E. FITTON, Acting Supervisor, La Veta.

Leadville National Forest—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant.

Medicine Bow National Forest (Colorado Division)—SHEP N. HUSTED, Forest Supervisor, Estes Park.

Montezuma National Forest—H. N. WHEELER, Forest Supervisor, Durango.

Ouray National Forest—H. K. PORTER, Forest Supervisor, Delta.

Park Range National Forest—F. D. WHITNEY, Acting Forest Supervisor, Kremmling.

Pikes Peak National Forest—MARK G. WOODRUFF, Forest Supervisor, Denver.
Pikes Peak Planting Station—J. F. KÜMMEL, Colorado City.

San Isabel National Forest—C. J. STAHL, Acting Forest Supervisor, Westcliffe.

San Juan National Forest—F. C. SPENCER, Forest Supervisor, Monte Vista.

Uncompahgre National Forest—H. K. PORTER, Forest Supervisor, Delta.

Wet Mountains National Forest—C. J. STAHL, Acting Forest Supervisor, Westcliffe.

White River National Forest—JAMES A. BLAIR, Forest Supervisor, Meeker.

KANSAS.

Garden City National Forest—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr.

MINNESOTA.

Minnesota National Forest—G. E. MARSHALL, Acting Forest Supervisor, Cass Lake.

MONTANA.

Ekalaka National Forest—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak.

Long Pine National Forest—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak.

NEBRASKA.

- Dismal River National Forest**—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. Halsey Planting Station—WILLIAM H. MAST; assistant, LA MOREE BESLEY, Halsey.
- Niobrara National Forest**—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor.
- North Platte National Forest**—C. A. SCOTT, Forest Supervisor, Halsey.

SOUTH DAKOTA.

- Black Hills National Forest**—J. F. SMITH, Forest Supervisor, Deadwood; H. J. BROWN, Forest Assistant.
- Cave Hills National Forest**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook.
- Short Pine National Forest**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook.
- Slim Buttes National Forest**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook.

UTAH.

- La Sal National Forest**—ORRIN C. SNOW, Forest Supervisor, Moab.
- Monticello National Forest**—ORRIN C. SNOW, Forest Supervisor, Moab.

WYOMING.

- Bear Lodge National Forest**—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.
- Crow Creek National Forest**—J. W. NELSON, Acting Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant.
- Medicine Bow National Forest**—J. W. NELSON, Acting Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant.
- Sierra Madre National Forest**—J. W. NELSON, Acting Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant.

DISTRICT 3.

H. A. E. MARSHALL, Forest Supervisor.

ARIZONA.

- Baboquivari National Forest**—R. J. SELKIRK, Acting Forest Supervisor, Tucson.
- Black Mesa National Forest**—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant.
- Chiricahua National Forest**—C. T. MCGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant.
- Grand Canyon National Forest (South)**—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant.
- Huachuca National Forest**—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales.
- Mount Graham National Forest**—THEO. T. SWIFT, Acting Forest Supervisor, Safford.
- Pinal Mountains National Forest**—THEO. T. SWIFT, Acting Forest Supervisor, Safford.
- Prescott National Forest**—EDWARD A. HINDERER, Acting Forest Supervisor, Prescott.
- San Francisco Mountains National Forest**—F. S. BREEN, Forest Supervisor, Flagstaff, J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant.

Santa Catalina National Forest—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant.

Santa Rita National Forest—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant.

Tonto National Forest—W. H. REED, Forest Supervisor, Roosevelt.

Tumacacori National Forest—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales.

NEW MEXICO.

Big Burros National Forest—R. C. McCLURE, Forest Supervisor, Silver City; DOUGLAS RODMAN, Forest Assistant.

Gallinas National Forest—J. H. KINNEY, Acting Forest Supervisor, Capitan.

Gila National Forest—R. C. McCLURE, Forest Supervisor, Silver City; W. H. GODDARD, Deputy Forest Supervisor; DOUGLAS RODMAN, Forest Assistant. Fort Bayard Planting Station—W. B. HADLEY, Fort Bayard.

Gnadalupe National Forest—T. S. WOOLSEY, Jr., Acting Forest Supervisor, Carlsbad.

Jemez National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant.

Lincoln National Forest—J. H. KINNEY, Acting Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Fort Stanton.

Magdalena National Forest—JOHN KERR, Forest Supervisor, Magdalena.

Manzano National Forest—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque.

Mount Taylor National Forest—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque.

Pecos National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. Las Gallinas Planting Station—S. Y. PARNAY, East Las Vegas.

Peloncillo National Forest—C. T. MCGLONE, Forest Supervisor, Paradise, Ariz.

Sacramento National Forest—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo.

San Mateo National Forest—JOHN KERR, Forest Supervisor, Magdalena.

Taos National Forest—ROSS McMILLAN, Forest Supervisor, Santa Fe.

OKLAHOMA.

Wichita National Forest—E. F. MORRISSEY, Forest Supervisor, Cache.

DISTRICT 4.

J. F. BRUINS, Forest Assistant.

ARIZONA.

Grand Canyon National Forest (North)—SELDEN F. HARRIS, Forest Supervisor, Fredonia; LORUM PRATT, Deputy Forest Supervisor.

IDAHO.

Bear River National Forest—W. W. CLARK, Forest Supervisor, Logan, Utah.

Caribou National Forest—J. T. WEDEMEYER, Acting Forest Supervisor, Idaho Falls.

Cassia National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.

Henrys Lake National Forest—HOMER E. FENN, Forest Supervisor, St. Anthony; J. E. BARTON, Forest Assistant.

Lemhi National Forest (North)—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City.

Lemhi National Forest (South)—GUY B. MAINS, Forest Supervisor, Mackay.

Payette National Forest—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant.

Pocatello National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.

Port Neuf National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.

Raft River National Forest—P. T. WRENSTED, Forest Supervisor, Pocatello.

Salmon River National Forest—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City.

Sawtooth National Forest—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant.

Weiser National Forest—JOHN B. LAFFERTY, Forest Supervisor, Weiser.

Yellowstone National Forest (Idaho Division)—HOMER E. FENN, Forest Supervisor, St. Anthony; J. E. BARTON, Forest Assistant.

NEVADA.

Charleston National Forest—DAVID BARNETT, Acting Forest Supervisor, Las Vegas.

Independence National Forest—CLARENCE N. WOODS, Acting Forest Supervisor, Elko.

Ruby Mountains National Forest—CLARENCE N. WOODS, Acting Supervisor, Elko.

UTAH.

Aquarius National Forest—GEORGE H. BARNEY, Forest Supervisor, Escalante.

Bear River National Forest—W. W. CLARK, Forest Supervisor, Logan.

Beaver National Forest—WILLIAM HURST, Forest Supervisor, Beaver.

Dixie National Forest—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George.

Fillmore National Forest—WILLIAM HURST, Forest Supervisor, Beaver.

Fish Lake National Forest—N. E. SNELL, Acting Forest Supervisor, Salina.

Glenwood National Forest—N. E. SNELL, Acting Forest Supervisor, Salina.

Grantsville National Forest—C. F. COOLEY, Forest Supervisor, Grantsville.

Manti National Forest—A. W. JENSEN, Forest Supervisor, Ephraim.

Payson National Forest—DAN S. PACK, Forest Supervisor, Payson.

Salt Lake National Forest—E. H. CLARKE, Forest Supervisor, Salt Lake City.

Wasatch Planting Station—N. J. FETHEROLF.

Sevier National Forest—TIMOTHY C. HOYT, Forest Supervisor, Parowan.

Uinta National Forest—WILLARD I. PACK, Forest Supervisor, Provo; W. JONES BOWEN, Deputy Forest Supervisor; D. S. MARSHALL, Deputy Forest Supervisor.

Vernon National Forest—C. F. COOLEY, Forest Supervisor, Grantsville.

Wasatch National Forest—E. H. CLARKE, Forest Supervisor, Salt Lake City.

WYOMING.

Yellowstone National Forest (Teton Division)—ROBERT E. MILLER, Forest Supervisor, Jackson.

Yellowstone National Forest (Wind River Division)—ZEPH JONES, Forest Supervisor, Pinedale.

DISTRICT 5.

R. L. P. BIGELOW, Forest Supervisor.

CALIFORNIA.

Diamond Mountain National Forest—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant.

Klamath National Forest—W. B. RIDER, Acting Forest Supervisor, Yreka.

Lassen Peak National Forest—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor; ALLAN R. POWERS, Forest Assistant.

- Modoc National Forest**—A. H. HOGUE, Forest Supervisor, Alturas.
- Monterey National Forest**—N. O. TORSTENSON, Forest Supervisor, Salinas.
- Pinnacles National Forest**—N. O. TORSTENSON, Forest Supervisor, Salinas.
- Plumas National Forest**—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant.
- San Bernardino National Forest**—R. H. CHARLTON, Forest Supervisor, Los Angeles.
- San Gabriel National Forest**—R. H. CHARLTON, Forest Supervisor, Los Angeles. Pasadena Planting Station—E. C. CLIFFORD, Pasadena.
- San Jacinto National Forest**—J. R. BELL, Forest Supervisor, Hemet.
- San Luis Obispo National Forest**—E. S. MAINWARING, Forest Supervisor, San Luis Obispo.
- Santa Barbara National Forest**—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara. San Marcos Planting Station—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara.
- Shasta National Forest**—G. A. COLEMAN, Forest Supervisor, Sisson; R. C. HACKLEY, Forest Assistant.
- Sierra National Forest (North)**—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS, Assistant Forest Inspector.
- Sierra National Forest (South)**—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, Forest Assistant.
- Stanislaus National Forest**—S. L. N. ELLIS, Forest Supervisor, Sonora.
- Stony Creek National Forest**—MADISON B. ELLIOTT, Forest Supervisor, Elk Creek.
- Tahoe National Forest**—JOHN C. WELLS, Acting Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant.
- Trabuco Canyon National Forest**—J. R. BELL, Forest Supervisor, Hemet.
- Trinity National Forest**—F. H. HAFLEY, Forest Supervisor, Weaverville.
- Warner Mountains National Forest**—A. H. HOGUE, Forest Supervisor, Alturas.

DISTRICT 6.

C. H. FLORY, Forest Assistant.

ALASKA.

- Alexander Archipelago National Forest and Afognak National Forest**—W. A. LANGILLE, Forest Supervisor, Ketchikan.

OREGON.

- Ashland National Forest**—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.
- Blue Mountains National Forest (East)**—HENRY IRELAND, Acting Forest Supervisor, Sumpter; C. R. SEITZ, Deputy Forest Supervisor; H. D. FOSTER, Forest Assistant.
- Blue Mountains National Forest (West)**—A. S. IRELAND, Forest Supervisor, Prineville.
- Bull Run National Forest**—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant.
- Cascade National Forest (North)**—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. COHOON, Forest Assistant.
- Cascade National Forest (South)**—S. C. BARTRUM, Forest Supervisor, Roseburg.
- Coquille National Forest**—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.
- Fremont National Forest**—M. L. ERICKSON, Acting Forest Supervisor, Lakeview.
- Goose Lake National Forest**—M. L. ERICKSON, Acting Forest Supervisor, Lakeview.

Heppner National Forest—THOMAS E. CHIDSEY, Acting Forest Supervisor, Heppner.

Imnaha National Forest—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa.

Siskiyou National Forest—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass.

Tillamook National Forest—F. E. AMES, Acting Forest Supervisor, Eugene.

Umpqua National Forest—F. E. AMES, Acting Forest Supervisor, Eugene.

Wenaha National Forest—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash.

WASHINGTON.

Colville National Forest—W. W. CRYDER, Acting Forest Supervisor, Republic.

Olympic National Forest—FRED HANSON, Forest Supervisor, Hoodspport.

Rainier National Forest—G. F. ALLEN, Forest Supervisor, Orting.

Washington National Forest (East)—G. W. MILHAM, Forest Supervisor, Chelan.

Washington National Forest (West)—GEORGE B. COLEMAN, Forest Supervisor, Sumas; B. P. KIRKLAND, Forest Assistant.

Washington National Forest (Yakima Division)—D. B. SELLER, Acting Forest Supervisor, Wenatchee.

Wenaha National Forest—J. M. SCHMITZ, Forest Supervisor, Walla Walla.

NATIONAL FORESTS NOT UNDER ADMINISTRATION.

District 1.—Little Rockies National Forest, Montana.

District 4.—Toyabe National Forest, Nevada; Toquima National Forest, Nevada; Monitor National Forest, Nevada.

SERVICE CHANGES IN MAY, 1907.

APPOINTED.

Forester—

INFORMATION—

R. W. PULLMAN, Expert.

DENDROLOGY—

P. D. EDMUNDS, Agent.

Products—

PUBLICATION—

HU MAXWELL, Expert.

WOOD UTILIZATION—

Mrs. EFFIE M. MABREY, Clerk.

Operation—

MAINTENANCE—

Miss CLARA H. GONTER, Clerk.

Miss CHARLOTTE C. MINER, Clerk.

Miss MARTHA M. DECKER, Clerk.

Miss NETTIE M. KIMMEL, Clerk.

Miss M. E. QUIGLEY, Clerk.

Miss LYDIA JACOBI, Clerk.

Miss LAURA W. STEEVER, Clerk.

Mrs. JULIET B. WEBB, Clerk.

ACCOUNTS—

W. K. BLESSING, Clerk.

JOS. G. FALCK, Clerk.

ORGANIZATION—

District 1.

BERTHA BENNETT, Clerk, Helena National Forest, Montana.

The following were appointed Assistant Forest Rangers:

GEORGE E. MARTIN, Big Hole National Forest (North), Montana.

THOMAS CROSSLEY, Bitter Root National Forest, Idaho.

BENZ S. FARNSWORTH, Cabinet National Forest (North), Montana.

HARRY E. CROSSLEY, Cabinet National Forest (North), Montana.

The following were appointed Forest Guards:

A. J. THUCHER, Big Belt National Forest, Montana.

JAMES H. HALL, Lewis and Clark National Forest (North), Montana.

JAMES GALLOWAY, Bitter Root National Forest, Montana.

CHARLES E. WATSON, Bitter Root National Forest, Montana.

GORDON EDSON, Madison National Forest, Montana.

JOHN FITZPATRICK, Lewis and Clark National Forest (South), Montana.

FRANK E. AVERY, Helena National Forest, Montana.

ISAAC CILLEY, Lewis and Clark National Forest (South), Montana.

CHARLES L. EMMONS, Lewis and Clark National Forest (North), Montana.

ORIEN L. BEAL, Hell Gate National Forest (East), Montana.

STANLEY COLLINS, Yellowstone National Forest (Absaroka Division), Montana.

ROBERT A. DEEWART, Yellowstone National Forest (Absaroka Division), Montana.

RICHARD GROOM, Lewis and Clark National Forest (South), Montana.

A. J. SANDERS, Cabinet National Forest (North), Montana.

ELI EDWARDS, Missoula National Forest, Montana.

CHARLES YOUNG, Lewis and Clark National Forest (South), Montana.

CHARLES R. PETERSON, Lewis and Clark National Forest (North), Montana.

GERRIT MELVIN VANDYK, Cabinet National Forest (South), Montana.

PERRY R. ROGERS, Kootenai National Forest, Montana.

JAMES CODDY, Kootenai National Forest, Montana.

FRANCISCUS E. BREKMAN, Kootenai National Forest, Montana.

FRED R. LOWE, Cabinet National Forest (North), Montana.

CHARLES MARSHALL, Cabinet National Forest (North), Montana.

FRANK HIGGINS, Lewis and Clark National Forest (South), Montana.

F. C. STUART, Big Belt National Forest, Montana.

JOSEPH FOWLER, Gallatin National Forest, Montana.

B. F. THOMPSON, Big Belt National Forest, Montana.

THOMAS E. HARRINGTON, Coeur d'Alene National Forest, Idaho.

C. I. PORTER, L. BRUNDIGE, A. NAPEAN, J. CHAMBERLAIN, G. A. COU, W. V. MOURING, R. FITTING, K. A. BROWN, B. F. CRESSLER, W. CARD, J. KIRCHNER, and W. H. HARRINGTON, Bitter Root National Forest, Idaho.

District 2.

J. W. CONANT, Clerk, San Juan National Forest, Colorado.

The following were appointed Assistant Forest Rangers:

IRA LONGBON, San Juan National Forest, Colorado.

CLARENCE A. BROWN, Leadville National Forest, Colorado.

NORMAN B. PRICE, San Juan National Forest, Colorado.

ROY D. RIDGWAY, Park Range National Forest, Colorado.

ELMER E. HATHAWAY, Montezuma National Forest, Colorado.

WILLIAM D. SKINNER, Ouray National Forest, Colorado.

WILLIAM H. KANISTAUX, Pikes Peak National Forest, Colorado.

BENJ. R. RICHARDSON, Holy Cross National Forest, Colorado.
 OTTO V. COULTER, Holy Cross National Forest, Colorado.
 ROBERT G. LYONS, Pikes Peak National Forest, Colorado.
 PAUL CLEAVE, Leadville National Forest, Colorado.
 JAMES M. THOMPSON, Las Animas National Forest, Colorado.
 EDMUND COUCH, Pikes Peak National Forest, Colorado.

The following were appointed Forest Guards:

HOMER O. REED, Black Hills National Forest, South Dakota.
 JOHN CRISS, Park Range National Forest, Colorado.
 G. E. ROY, San Juan National Forest, Colorado.
 JOSEPH A. DONERY, Minnesota National Forest, Minnesota.
 J. L. BREWER, Long Pine National Forest, Montana.
 J. STUART MCPHAIL, Sierra Madre National Forest, Wyoming.

District 3.

STEPHEN J. HUMESTON, clerk, San Francisco Mountains National Forest, Arizona.
 MURRAY AVERETT, Assistant Forest Ranger, Chiricahua National Forest, Arizona.

The following were appointed Forest Guards:

J. B. MCGUINNES, Manzano National Forest, New Mexico.
 CHARLES B. EDWARDS, Tonto National Forest, Arizona.
 EVERETT T. HOLMES, Magdalena National Forest, New Mexico.
 LESLIE E. SHIPP, Gila National Forest, New Mexico.
 JAMES W. FLEMING, Big Burros National Forest, New Mexico.
 J. H. ROGERS, San Mateo National Forest, New Mexico.
 ROBERT THOMPSON, Tonto National Forest, Arizona.
 MORRISON W. HOCKADAY, Santa Rita National Forest, Arizona.
 MILTON A. HOLCOMB, Santa Rita National Forest, Arizona.
 C. M. DOUGLASS, Mount Taylor National Forest, New Mexico.
 CLARK W. STORY, Jr., Prescott National Forest, Arizona.
 JOSEPH H. WOOLSEY, Mount Graham National Forest, Arizona.
 WILLIAM K. MCDANIEL, Black Mesa National Forest, Arizona.
 HOMER J. MAPES, Tumacacori National Forest, Arizona.
 J. S. SPENCER, Manzano National Forest, New Mexico.

District 4.

MARGARET E. JENSEN, clerk, Bear River National Forest, Utah.

The following were appointed Assistant Forest Rangers:

GEORGE A. COLE, Dixie National Forest, Utah.
 ALBERT DE LONG, Jr., Sevier National Forest, Utah.
 SAMUEL R. PRATT, Sevier National Forest, Utah.
 BENJAMIN C. HEILMAN, Salt Lake National Forest, Utah.
 THOMAS E. WOOLSTENHULME, Uinta National Forest, Utah.

The following were appointed Forest Guards:

JOHN BAUMGARTNER, Sawtooth National Forest, Idaho.
 CHESTER L. WOODWARD, Independence National Forest, Nevada.
 ALLEN JENSEN, Sawtooth National Forest, Idaho.
 RENHOLT MATTISON, Fish Lake National Forest, Utah.
 W. H. JONES, Sawtooth National Forest, Idaho.
 DAVID BIRD, Fish Lake National Forest, Utah.
 E. C. ROSS, Sawtooth National Forest, Idaho.

W. H. JONES, Sawtooth National Forest, Idaho.
 HARRY L. FISK, Sawtooth National Forest, Idaho.
 W. M. ANDERSON, Weiser National Forest, Idaho.
 R. E. CLABBY, Weiser National Forest, Idaho.
 WELLS MCGOWAN, Sawtooth National Forest, Idaho.
 AL HOLCOMB, Sawtooth National Forest, Idaho.
 WILLIAM PARKER, Sawtooth National Forest, Idaho.
 CHARLES A. SPACKMAN, Caribou National Forest, Idaho.
 FRANK M. BUTLER, Caribou National Forest, Idaho.
 JOSEPH H. KENNINGTON, Caribou National Forest, Idaho.
 J. S. J. NELSON, Caribou National Forest, Idaho.
 JAMES JOHNSON, Caribou National Forest, Idaho.
 L. S. STOCKSLAGGER, Sawtooth National Forest, Idaho.
 C. I. HUDDLE, Sawtooth National Forest, Idaho.
 W. K. HUNTINGTON, Sawtooth National Forest, Idaho.
 LEWIS HAWKINS, Bear River National Forest, Utah.
 ZELL M. SKOUGARD, Sevier National Forest, Utah.
 PROCTOR PERKINS, Sawtooth National Forest, Idaho.
 J. G. WEBB, Sawtooth National Forest, Idaho.
 WILLIAM L. OLIVER, Raft River National Forest, Idaho.
 WILLIAM A. WRIGHT, Sawtooth National Forest, Idaho.
 LOUIS D. EDMUNDS, Payette National Forest, Idaho.
 CHRISTOPHER E. FOLEY, Sawtooth National Forest, Idaho.
 CHARLES C. WEST, Sawtooth National Forest, Idaho.
 J. V. WILLIAMS, Caribou National Forest, Idaho.
 ALFRED CHRISTENSON, Caribou National Forest, Idaho.
 GEORGE L. SMITH, Port Neuf National Forest, Idaho.
 HERBERT E. WOOLEY, Sevier National Forest, Utah.
 SOLOMON SMITH, Sawtooth National Forest, Idaho.
 LOUIS CUTLER, Grand Canyon National Forest (North), Arizona.
 WM. H. SHANIFELT, Lemhi National Forest (North), Idaho.
 GEORGE NICHOLS, Lemhi National Forest (North), Idaho.
 W. A. MOULTON, Yellowstone National Forest (Wind River Division), Wyoming.

District 5.

JAMES W. DILLEY, clerk, Plumas National Forest, California.

The following were appointed Assistant Forest Rangers:

FRANKLIN H. SMITH, Plumas National Forest, California.
 FRANK L. MEAD, Diamond Mountain National Forest, California.
 FRANK P. CUNNINGHAM, Shasta National Forest, California.
 ROBERT FINLEY, Klamath National Forest, California.
 JOHN Y. TOLER, Sierra National Forest (North), California.
 HENRY C. YOUNG, Sierra National Forest (South), California.
 FRANK McCARN, Tahoe National Forest, California.
 JOHN S. SIVERTSON, Tahoe National Forest, California.
 CLAUDE BIDGOOD, San Bernardino National Forest, California.

The following were appointed Forest Guards:

GEORGE MILLER, Stanislaus National Forest, California.
 ROY BOOTHIE, Sierra National Forest (North), California.
 JOHN M. MILLER, Sierra National Forest (North), California.
 WALLACE H. PARTRIDGE, Sierra National Forest (North), California.

WALTER S. BARTON, Tahoe National Forest, California.
 C. E. SQUIRES, Stony Creek National Forest, California.
 WILLIAM F. JOHNSTON, San Luis Obispo National Forest, California.
 W. W. ROGERS, Shasta National Forest, California.
 L. J. BROWN, Shasta National Forest, California.
 GEORGE McMULLIN, Shasta National Forest, California.
 ROY LUCAS, Stony Creek National Forest, California.

District 6.

The following were appointed Assistant Forest Rangers:

MARTIN S. DURBIN, Cascade National Forest (South), Oregon.
 J. D. COCHRAN, Cascade National Forest (South), Oregon.
 PERCY T. SHIELLEY, Cascade National Forest (North), Oregon.
 J. FRED McCLAIN, Imnaha National Forest, Oregon.
 WINFIELD S. OLINGER, Cascade National Forest (North), Oregon.

The following were appointed Forest Guards:

S. E. LUCAS, Ranier National Forest, Washington.
 ARTHUR RADIGAN, Colville National Forest, Washington.
 FREDERICK C. BREWSTER, Colville National Forest, Washington.
 R. W. SWEETLAND, Siskiyou National Forest, Oregon.
 HAYS W. HOUGHLAND, Colville National Forest, Washington.
 CHARLES NELSON, Goose Lake National Forest, Oregon.
 R. B. JACKSON, Fremont National Forest, Oregon.
 CLIFFORD E. NEAL, Blue Mountains National Forest (East), Oregon.
 HARRY C. BLANKENSHIP, Washington National Forest (East), Washington.
 MARION BURLINGAME, Cascade National Forest (North), Oregon.
 FRED J. J. BIRD, Cascade National Forest (North), Oregon.
 E. H. ROSE, Ranier National Forest, Washington.
 J. A. GASTON, Siskiyou National Forest, Oregon.
 H. W. HUNT, Cascade National Forest (South), Oregon.
 E. H. MANN, Cascade National Forest (South), Oregon.
 ERNEST WALKER, Blue Mountains National Forest (East), Oregon.
 J. W. ELLIS, Heppner National Forest, Oregon.
 C. M. IRVINE, Ranier National Forest, Washington.
 STEPHEN A. MOORE, Cascade National Forest (South), Oregon.
 D. R. MORRISON, Siskiyou National Forest, Oregon.
 J. C. GIDDINGS, Coquille National Forest, Oregon.
 DOCK F. SOUTH, Cascade National Forest (South), Oregon.
 FRANK H. WRIGHT, Blue Mountains National Forest (East), Oregon.
 DANNIE W. FISK, Blue Mountains National Forest (East), Oregon.
 RALPH R. LEWIS, Bull Run National Forest, Oregon.
 DELMER S. RICE, Washington National Forest (East), Washington.
 THOS. R. PINKERTON, Washington National Forest (East), Washington.
 JOSEPH A. HARRIS, Imnaha National Forest, Oregon.

APPOINTMENTS REVOKED.

Operation—

ORGANIZATION—

District 1.

A. NEPEAN, Forest Guard, Bitter Root National Forest, Idaho.
 MARKUS RAND, Forest Guard, Lewis and Clark National Forest (North), Montana.
 ORIN P. WILHOIT, Forest Guard, Madison National Forest, Montana.
 JAMES GALLOWAY, Forest Guard, Bitter Root National Forest, Montana.
 FRANK W. PYEATT, Forest Guard, Lemhi National Forest (North), Idaho.

District 2.

JAMES E. SHUE, Assistant Forest Ranger, Montezuma National Forest, Colorado.

District 4.

LOUIS D. EDWARDS, Forest Guard, Payette National Forest, Idaho.
 W. A. WHITE, Forest Guard, Sawtooth National Forest, Idaho.
 REXHOLT MATTISON, Forest Guard, Fish Lake National Forest, Utah.
 FRANK R. MARTIN, Forest Guard, Sawtooth National Forest, Idaho.
 ED HUFFMAN, Forest Guard, Sawtooth National Forest, Idaho.
 H. H. TANSING, Forest Guard, Sawtooth National Forest, Idaho.
 J. A. COOLEY, Forest Guard, Sawtooth National Forest, Idaho.
 JOSEPH BABINGTON, Forest Guard, Sawtooth National Forest, Idaho.
 H. L. SHAW, Forest Guard, Sawtooth National Forest, Idaho.
 ALLEN JENSEN, Forest Guard, Sawtooth National Forest, Idaho.
 H. L. FISK, Forest Guard, Sawtooth National Forest, Idaho.

District 5.

GEORGE SCHUSTER, Forest Guard, San Gabriel National Forest, California.
 ADOLPH ROMO, Forest Guard, Stanislaus National Forest, California.
 HENRY E. ENGRAHAM, Forest Guard, San Jacinto National Forest, California.

District 6.

PAUL UNDERWOOD, Forest Guard, Washington National Forest (East), Washington.
 DILMORE S. WRIGHT, Forest Guard, Washington National Forest (East), Washington.
 CHARLES NELSON, Forest Guard, Goose Lake National Forest, Oregon.
 ERNEST WALKER, Forest Guard, Blue Mountains National Forest (East), Oregon.

PROMOTED.**Forester—****INFORMATION—**

HERBERT A. SMITH, Expert and Editor.

LAW—

PHILIP P. WELLS, Law Officer.

Grazing—

ALBERT F. POTTER, Assistant Forester.

Silviculture—

WM. T. COX, Assistant Forester.

MANAGEMENT—

E. E. CARTER, Chief of the Office of Management.

W. G. WEIGLE, Assistant Chief of the Office of Management.

EARLE H. CLAPP, in charge of the Section of Timber Sales.

G. MORRIS HOMANS, Assistant in charge of the Section of Timber Sales.

SAMUEL J. RECORD, in charge of the Section of Reconnaissance.

FRED G. PLUMMER, Civil Engineer.

SILVICS—

RAPHAEL ZON, Chief of the Office of Silvics.

EARL H. FROTHINGHAM, in charge of the Section of Compilation.

EXTENSION—

SAMUEL N. SPRING, Chief of the Office of Extension.

LOUIS C. MILLER, in charge of the Section of Planting.

W. H. VON BAYER, in charge of the Section of Reconnaissance.

SAMUEL B. DETWILER, in charge of the Section of Cooperation.

Products—

WILLIAM L. HALL, Assistant Forester.

WOOD UTILIZATION—

R. S. KELLOGG, Chief of the Office of Wood Utilization.

McGARVEY CLINE, in charge of the Section of Wood Uses.

PUBLICATION—

FINDLEY BURNS, Chief of the Office of Publication.

BRISTOW ADAMS, in charge of the Section of Distribution.

Operation—

JAMES B. ADAMS, Assistant Forester.

LANDS—

A. C. RINGLAND, in charge of the Section of Boundaries.

F. L. HARVEY, in charge of the Section of Claims.

ENGINEERING—

WILLARD E. HERRING, Chief of the Office of Engineering.

ORGANIZATION—

C. S. CHAPMAN, Chief of the Office of Organization.

CLYDE LEAVITT, Assistant Chief of the Office of Organization.

District 1.

W. A. BRIGGS, Forest Guard, Coeur d'Alene National Forest, Idaho.

GROVER A. ALLEN, Forest Guard, Coeur d'Alene National Forest, Idaho.

CHIPMAN L. CRAWFORD, Forest Guard, Coeur d'Alene National Forest, Idaho.

R. M. DEBITT, Forest Guard, Coeur d'Alene National Forest, Idaho.

FRED UHLMANN, Forest Guard, Coeur d'Alene National Forest, Idaho.

H. R. SNIDER, Forest Guard, Coeur d'Alene National Forest, Idaho.

R. E. ROWLEY, Forest Guard, Coeur d'Alene National Forest, Idaho.

W. H. MCCOY, Deputy Forest Supervisor, Madison National Forest, Montana.

D. W. MARYOTT, to Deputy Forest Ranger, Big Belt National Forest, Montana.

H. B. YERKES, Forest Guard, Yellowstone National Forest (Absoraka Division), Montana.

District 2.

J. W. NELSON, to Supervisor, Medicine Bow (Wyoming Division), Crow Creek and Sierra Madre National Forests, Wyoming.

District 3.

C. H. HINDERER, to Acting Supervisor, Sacramento National Forest, New Mexico.

EDWARD N. KAVANAGH, to Forest Ranger, Leadville National Forest, Colorado.

CLAUDE THOMPSON, to Deputy Forest Ranger, San Francisco Mountain National Forest, Arizona.

R. J. SELKIRK, to Forest Supervisor, Santa Catalina, Santa Rita, and Baboquivari National Forests, Arizona.

ROSCOE G. WILSON, to Acting Forest Supervisor, Huachuca and Tumacacori National Forests, Arizona.

District 4.

HENRY A. BERGH, to Deputy Forest Ranger, Sawtooth National Forest, Idaho.

C. L. BARBER, Forest Guard, Sawtooth National Forest, Idaho.

District 5.

JAMES W. LEEPER, Assistant Forest Ranger, Sierra National Forest (South), California.

RAYMOND TYLER, to Forest Ranger, Sierra National Forest (North), California.

District 6.

THOMAS P. MACKENZIE, to Deputy Forest Ranger, Wenaha National Forest, Washington.

THOMAS E. CHIDSEY, Forest Ranger, Heppner National Forest, Oregon.

J. MILTON SULLENS, to Deputy Forest Ranger, Blue Mountains National Forest (East), Oregon.

JOSEPH D. WALLACE, Assistant Forest Ranger, Cascade National Forest (North), Oregon.

RALPH R. LEWIS, Forest Guard, Bull Run National Forest, Oregon.

PERRY A. SOUTH, Forest Guard, Cascade National Forest (North), Oregon.

C. D. SPRINGER, Forest Guard, Cascade National Forest (North), Oregon.

R. N. GRIBBLE, Forest Guard, Cascade National Forest (North), Oregon.

EARL HALVERSON, Forest Guard, Washington National Forest (East), Oregon.

RESTORED FROM FURLOUGH.**Silviculture—****MANAGEMENT—**

W. B. PIPER, Forest Assistant.

Operation—**ORGANIZATION—***District 1.*

DANIEL J. DUNHAM, Assistant Forest Ranger, Bitter Root National Forest, Idaho.

GEORGE SIEBENTRITT, Assistant Forest Ranger, Gallatin National Forest, Montana.

BENJAMIN B. HOLLAND, Assistant Forest Ranger, Lewis and Clark National Forest (South), Montana.

District 2.

WM. H. HAZZARD, Deputy Forest Ranger, Leadville National Forest, Colorado.

LEWIS SWALLOW, Assistant Forest Ranger, San Isabel National Forest, Colorado.

District 5.

ORLAND CHANDLER, Assistant Forest Ranger, San Bernardino National Forest, California.

JAMES STOUT, Assistant Forest Ranger, Tahoe National Forest, California.

J. G. STANCHFIELD, Assistant Forest Ranger, San Gabriel National Forest, California.

District 6.

JOSEPH D. WALLACE, Assistant Forest Ranger, Cascade National Forest (North), Oregon.

THOMAS THOMPSON, Assistant Forest Ranger, Washington National Forest (West), Washington.

AXEL LARSEN, Assistant Forest Ranger, Washington National Forest (West), Washington.

L. D. HURT, Assistant Forest Ranger, Washington National Forest (West), Washington.

REINSTATED.**Operation—****ORGANIZATION—***District 3.*

A. M. NEAL, Assistant Forest Ranger, Wichita National Forest, Oklahoma.

TRANSFERRED.

Operation—

ORGANIZATION—

- E. A. SHERMAN, Chief Inspector, from Hell Gate National Forest to General Inspection.
- GEORGE A. REED, Forest Guard, from San Francisco Mountains National Forest to Grand Canyon National Forest (South), Arizona.
- ALBERT L. SWEITZER, Assistant Forest Ranger, from Montezuma National Forest to San Juan National Forest, Colorado.
- ERNEST W. SHAW, Forest Ranger, from Lincoln National Forest, New Mexico, to San Juan National Forest, Colorado.
- HENRY L. SPENCER, Forest Ranger, from Uncompahgre National Forest to Ouray National Forest, Colorado.
- F. E. JOY, Forest Expert, from Boundaries to Engineering and assigned to Organization.
- C. W. SHELLABARGER, Deputy Forest Ranger, from Wet Mountains National Forest to San Isabel National Forest, Colorado.
- FRANK H. WAGNER, Deputy Forest Ranger, from San Isabel National Forest to Wet Mountains National Forest, Colorado.
- JAMES B. STEPHENSON, Assistant Forest Ranger, from San Jacinto National Forest to Trabuco Canyon National Forest, California.
- C. H. HINDERER, Deputy Forest Ranger, from Prescott National Forest, Arizona, to Acting Forest Supervisor, Sacramento National Forest, New Mexico.
- CHARLES E. McMULLIN, Forest Ranger, from Uncompahgre National Forest, Colorado, to Boundaries.
- FRANK A. BLAIR, Deputy Forest Ranger, from Leadville National Forest to Uncompahgre National Forest, Colorado.
- CARL H. YOUNG, Assistant Forest Ranger, from Cascade National Forest (South) to Umpqua National Forest, Oregon.
- GEORGE L. WHIDDEN, Forest Ranger, from Gila National Forest to Big Burros National Forest, New Mexico.
- CLYDE LEAVITT, Forest Assistant, from Boundaries to Organization.
- ROBERT L. CAMPBELL, Clerk, from General Inspection to Organization.
- FRED GRAHAM, Forest Guard, from San Bernardino National Forest to San Gabriel National Forest, California.
- J. H. CLARK, Forest Ranger, from Boundaries to Engineering and assigned to Organization.
- SYLVANUS COLLETT, Forest Ranger, from Dixie National Forest to Uinta National Forest, Utah.
- GEORGE H. CECIL, Forest Inspector, from Organization to Inspection.
- A. M. NEAL, Assistant Forest Ranger, from Wichita National Forest, Oklahoma, to Sacramento National Forest, New Mexico.
- MARTIN S. DURBIN, Assistant Forest Ranger, from Cascade National Forest (South), Oregon, to Umpqua National Forest, Oregon.
- GEORGE H. MULLISON, Deputy Forest Ranger, from Medicine Bow National Forest to Sierra Madre National Forest, Wyoming.
- GORDON EDSON, Forest Guard, from Madison National Forest, Montana, to Engineering.
- S. A. BLANKENSHIP, Deputy Forest Ranger, from Washington National Forest (East) to Washington National Forest (Yakima Division), Washington.
- T. S. WOOLSEY, Jr., Technical Assistant, from San Francisco Mountains National Forest, Arizona, to General Inspection.
- J. D. COCHRAN, Assistant Forest Ranger, from Cascade National Forest (South) to Siskiyou National Forest, Oregon.

- W. A. MERRILL, Deputy Forest Ranger, from Stony Creek National Forest to Tahoe National Forest, California.
- RICHARD L. SMITH, Deputy Forest Ranger, from Yellowstone National Forest (Teton Division), Wyoming, to Ruby Mountains National Forest, Nevada.
- ULRICH C. POGGE, Forest Ranger, from Henrys Lake National Forest to Yellowstone National Forest, Idaho.
- ROBERT G. LYONS, Assistant Forest Ranger, from Pikes Peak National Forest, Colorado, to Inspection.
- W. D. FUNK, Deputy Forest Ranger, from Sevier National Forest to Manti National Forest, Utah.
- JOHN VAN DEVENTER, Deputy Forest Ranger, from Trabuco Canyon National Forest to San Jacinto National Forest, California.
- J. E. BARTON, Forest Assistant, from Bitter Root National Forest to Henrys Lake National Forest, Idaho.
- ERNEST B. LONG, Deputy Forest Ranger, from San Gabriel National Forest to San Bernardino National Forest, California.
- R. B. JACKSON, from Fremont National Forest to Goose Lake National Forest, Oregon.
- ROBERT G. LYON, Assistant Forest Ranger, from Pikes Peake National Forest Colorado, to Inspection.
- LUCAS W. HASTINGS, Assistant Forest Ranger, from Henrys Lake National Forest to Yellowstone National Forest (Idaho Division), Idaho.
- JAMES H. JAMISON, Forest Guard, from Henrys Lake National Forest to Yellowstone National Forest (Idaho Division), Idaho.
- ULRICH C. POGGE, Forest Ranger, from Henrys Lake National Forest to Yellowstone National Forest (Idaho Division), Idaho.
- ROWLAND W. BROWN, Assistant Forest Ranger, from Henrys Lake National Forest to Yellowstone National Forest (Idaho Division), Idaho.
- WILLIAM K. MCDANIEL, Forest Guard, from Black Mesa National Forest to San Francisco Mountains National Forest, Arizona.
- ROSCOE G. WILLSON, from Deputy Forest Ranger, Prescott National Forest to Acting Forest Supervisor, Huachuca and Tumacacori National Forests, Arizona.

RESIGNED.

Operation—

ORGANIZATION—

District 1.

- JAMES E. QUINN, Forest Guard, Big Hole National Forest (South), Montana.
- MICHAEL RODDY, Forest Guard, Cabinet National Forest, Montana.
- VIRGIL T. WOOD, Assistant Forest Ranger, Lewis and Clark National Forest (South), Montana.
- JAMES E. QUIVEY, Forest Guard, Cabinet National Forest (North), Montana.

District 2.

- JOHN J. MCNAMEE, Forest Guard, Black Hills National Forest, South Dakota.
- CHARLES H. DODGE, Forest Ranger, Black Hills National Forest, South Dakota.
- ALBERT WHITNEY, Assistant Forest Ranger, Park Range National Forest, Colorado.
- B. F. LAMNEAU, Forest Guard, Park Range National Forest, Colorado.

District 3.

M. SMITH, Jr., Forest Assistant, Gila National Forest, New Mexico.
 PORTER H. SISNEY, Assistant Forest Ranger, Jemez National Forest, New Mexico.
 JOHN JONES, Forest Guard, Big Burros National Forest, New Mexico.
 WILLARD L. SEVIER, Deputy Forest Ranger, San Francisco Mountains National Forest, Arizona.
 E. A. BLEVINS, Forest Guard, Chiricahua National Forest, Arizona.
 PAUL J. FOSTER, Forest Guard, Lincoln National Forest, New Mexico.
 FRANK E. FINTZ, Forest Guard, Prescott National Forest, Arizona.
 WILLIAM F. BINGHAM, Deputy Forest Ranger, Gallinas National Forest, New Mexico.
 BIRTSALL W. JONES, Assistant Forest Ranger, Santa Rita National Forest, Arizona.
 E. H. MORRISSEY, Forest Guard, Wichita National Forest, Oklahoma.

District 4.

SYLVANUS COLLETT, Forest Ranger, Uinta National Forest, Utah.

District 5.

MARTIN H. ADAMS, Assistant Forest Ranger, Lassen Peak National Forest, California.
 HORACE W. CRANDELL, Jr., Assistant Forest Ranger, San Bernardino National Forest, California.

District 6.

FRED E. EVANS, Assistant Forest Ranger, Cascade National Forest (North), Oregon.
 JOSEPH F. GALBRAITH, Assistant Forest Ranger, Washington National Forest (West), Washington.

SEPARATED.**Operation—****ORGANIZATION—***District 1.*

JOHN SULLIVAN, Assistant Forest Ranger, Lewis and Clark National Forest (South), Montana.

District 4.

NICHOLAS L. SHEFFIELD, Assistant Forest Ranger, Dixie National Forest, Utah.

District 6.

GEORGE W. O'BRIEN, clerk, Imnaha National Forest, Oregon.
 JOSEPH S. FULLER, Forest Guard, Goose Lake National Forest, Oregon.

With deep regret announcement is made of the death on May 5, 1907, of Mr. JOHN SULLIVAN, Assistant Forest Ranger on the Lewis and Clark National Forest (Southern Division).

SERVICE NOTES FOR JUNE.

OFFICE OF THE FORESTER.

Revised "Use Book"—

The revised edition of "The Use Book," containing the new regulations which go into effect July 1, 1907, will be in the hands of supervisors by June 20. Supervisors will be expected to familiarize themselves with the changed and added regulations before these go into effect.

Itinerary of Mr. Shaw—

Mr. A. C. Shaw will visit the supervisors at the following places and times to instruct them in the preparation of cases for trial and in other legal matters:

Phoenix, Ariz., June 10; Prescott, Ariz., June 11; Durango, Colo., June 13; Weiser, Idaho, June 20; Helena, Mont., June 24; Sumas, Wash., June 28; Portland, Oreg., June 30; Susanville, Cal., after July 5, indefinitely. This program may be varied by Mr. Shaw as necessity demands, but he will notify the supervisors of any change.

The Forester on the pardon of Everett B. Thomas—

Concerning petitions for the pardon of former Forest Supervisor Everett B. Thomas, who was convicted about a year ago of falsification of his accounts, the following letter was written by the Forester:

APRIL 29, 1907.

Mr. WM. G. KEREKHOFF,

634 Pacific Electric Building, Los Angeles, Cal.

DEAR Mr. KEREKHOFF: Your letter and the papers transmitted by you concerning the pardon of former Forest Supervisor Everett B. Thomas have been carefully considered. The statements made in some of the papers of Mr. Thomas's conduct, and the reasons given for his pardon, are so erroneous that I must refer to them in some detail.

1. Mr. Thomas was not a good forest officer. The investigation which led to his conviction showed that, although he reported frequent visits to the field, as a matter of fact he almost never set foot upon the National Forests intrusted to his care.

2. The amount involved in his frauds was not small, but large. The ten counts upon which he was convicted were but a small percentage of the number of false entries which could have been proven against him if it had been considered necessary. He was not only technically guilty of petty falsifications, but actually guilty of systematic and long-continued falsifications.

3. I know of no ground whatever for the assertion that the moneys fraudulently collected by him were made up by expenditures in the interests of the Government in other directions.

4. The proceedings against him were not in any sense persecution, nor were they conducted in an unfair spirit, nor did they have any relation whatever to any political feud in which Mr. Thomas was on the losing side. They were instituted solely for the purpose of punishing a Government officer who had, not in small but in large matters, proved himself false to his trust, and to prevent like conduct on the part of other public officers.

If I believed that his pardon would be understood as tardy justice to a persecuted man, or taken by any considerable number of people as a vindication of his conduct,

I should be constrained to oppose it. But not so believing, the papers, with a copy of this letter, have been transmitted to the Department of Justice with the recommendation that the pardon be granted. I do this because I think that Mr. Thomas has been sufficiently punished to deter him or other public officers from committing like serious offenses, and because his family needs his support, and not because I think he was in any sense ill-treated or punished beyond his deserts.

I am also sending a copy of this letter to each person whose letters and petitions were forwarded to me by you.

Very sincerely, yours,

(Signed)

GIFFORD PINCHOT, *Forester.*

Progress of Appalachian Survey—

W. W. Ashe has begun in northern Georgia to draw the boundaries of the lands which should be reserved in the southern Appalachian Mountains. This work is being done under the provision included in the Agricultural appropriation act of the last Congress, which provides that the Secretary of Agriculture shall make a careful study of the Appalachian Mountains and report to the next Congress what areas it is important to reserve for forest purposes. The work begun by Mr. Ashe will be continued through all the important portions of the Appalachian Mountains.

Unique Educational Campaign for Forestry—

Representative R. P. Hobson, of Alabama, has just carried through a unique educational campaign which has resulted in great good for forestry. Captain Hobson secured representatives from four bureaus of the Department of Agriculture, and accompanied them on a tour of his district, speaking on agricultural subjects, to audiences averaging about 350 persons, at 20 different points. The representative from the Forest Service was William L. Hall, Assistant Forester, who found great interest on the part of land owners in proper methods of handling their timberlands. Two hundred and five applications for woodlot examinations were received as a result of this work.

DENDROLOGY.

Notes on the Distribution of Trees.

[Except when otherwise stated, it is to be understood that observers whose names are given in these notes are members of the Forest Service. Credit is due Miss Mary C. Gannett for assistance in the preparation of these notes from various records.—GEO. B. S.]

Sugar Pine (*Pinus lambertiana*).—This species was recently discovered by W. J. Ward at points about 5 miles from the sea in the Coast Range of southern Oregon (Curry County; Sec. 2, T. 38 S., R. 14 W., Sec. 35, T. 37 S., R. 14 W.; elevation, approximately 1,700 feet). Hitherto, sugar pine has not been found in Oregon west of the Siskiyou.

Eastern Larch (*Larix laricina*).—A new station for the eastern larch, said to have been found by G. C. Bettles in the Yukon Valley, was recently reported by F. C. Schrader, of the U. S. Geological Survey. Mr. Bettles, a pioneer of the region, reported seeing this tree on the middle Koyukuk on and above the Arctic Circle (about latitude 66° 40' to latitude 67°), the farthest north and west it has ever been observed.

White spruce (*Picea canadensis*).—The range of white spruce has been considerably extended in Alaska through recent explorations by members of the Forest Service

and the U. S. Geological Survey. W. A. Langille and W. H. Osgood, of the Biological Survey, found that it extends from the interior forest around the low base of the unforested Alaskan peninsula to the Pacific coast slopes at Cook's Inlet, there meeting the Sitka spruce, alpine hemlock, and a few other west coast species which come northward from Washington and Oregon along the Alaskan coast. It was found by members of the U. S. Geological Survey to occur also in the upper basins of the Sushitna and Copper rivers, possibly reaching these basins from the heads of the Tanana River by way of low passes in the Alaska Range. It has long been conjectured that white spruce occurs on many of the arctic rivers of Alaska for the reason that driftwood, apparently of this species, is common about their mouths. White spruce has, however, been observed only on the Turner River, just west of the international boundary, where it was seen in 1890 by J. H. Turner, and recently by S. J. Marsh, a prospector, whose observations were reported in 1906 by A. H. Brooks of the U. S. Geological Survey. In this locality it extends to within 30 miles of the mouth of Turner River and nearly to latitude $69^{\circ} 30'$, the northmost limit now known for it.

White spruce occurs in the Black Hills, South Dakota, and in the Rocky Mountains from the head of the Saskatchewan River, Canada, southward into northern Montana. Here H. B. Ayres reported it in 1899 and 1900 as far south as the South Fork of Teton Creek (latitude $47^{\circ} 50'$), on Summit Creek, in valleys of the Whitefish Mountains, and westward on upper Stillwater, Edna, and Fortin creeks, while S. J. Holsinger noted it in 1903, and R. V. R. Reynolds in 1906, as occasional in the Kootenai River and Cabinet Mountains regions, still farther westward. Karl W. Woodward has just sent in specimens of this spruce from Swan Lake, Montana.

Black Spruce (Picea mariana).—The black spruce follows the white spruce throughout its northern range in Alaska. Much is yet to be learned regarding the exact distribution of these trees in Alaska, where both are somewhat changed in distinctive features from their far eastern representatives. Small numbers of black spruce were observed in 1900 by W. H. Osgood in peat bogs at Hope, Sunrise, and Tyonek on the Cook's Inlet coast, and in 1903 W. A. Langille detected it in swamps on the plateau of Kenai Peninsula, especially on Chicaloon Flats.

Blue Spruce (Picea parryana).—The range of blue spruce has for some time been thought to be confined to Colorado, eastern Utah, and the Wind River Mountains, Wyoming, but recent reports have extended the range to parts of southern Montana, New Mexico, Arizona, and to other sections of Wyoming. J. H. Hatton noted its quite general occurrence in the Rocky Mountains of New Mexico, on streams and in moist places at an elevation of from 8,500 to 10,500 feet, as did also Prof. E. L. Greene, of the Catholic University, in 1901 at Chama, Rio Arriba County, near the border between Colorado and New Mexico. In 1898 Professor Norton and C. H. T. Townsend saw it on Sierra Blanca Peak, Lincoln National Forest, while W. R. Mattoon and A. O. Waha found it on flats of streams at an elevation of from 7,000 to 9,000 feet, near the summits of the Mogollon Mountains, in the Gila National Forest. Mr. Mattoon reported it recently as occurring also in the Mount Graham National Forest at 9,500 feet elevation on the banks of streams near upper Columbine Camp at the head of Ash Creek Canyon.

The following observations have been made of this tree outside of the Wind River Mountains, Wyoming. P. A. Rydberg (not of the Forest Service), in 1900, and J. Wiesner, an Austrian botanist, in 1905, found it fairly common in the Yellowstone Park at elevations of about 6,500 to 8,000 feet. G. H. Cecil reported it from the Shoshone Mountains as occurring above 6,000 feet, and P. T. Coolidge reported it in small numbers from the Bighorn Mountains above 6,000 feet, throughout the National Forest. Reports of blue spruce in Montana include records by J. H. Hatton and M. N. Stickney of occasional trees along streams in the Big Belt and Rimini mountains, from elevations of 5,000 feet and upward, and a record by M. N. Stickney of

trees in gulches of the Helena National Forest. Blue spruce has also been reported from the ranges of southern Idaho (Sawtooth Mountains), and from eastern Washington and Oregon, but these stations are yet to be verified.

Weeping Spruce (*Picea breweriana*).—P. T. Harris has just reported finding weeping spruce on the head of Parks Creek, a tributary of Shasta River (T. 41 N., R. 6 W.). This new locality is west of Mount Shasta on the Trinity-Shasta River divide, and is approximately the region in which Prof. W. H. Brewer discovered weeping spruce in 1863. The partial confirmation which Mr. Harris's discovery gives of Professor Brewer's report, so long unverified, is of unusual interest. G. A. Coleman and others report that groves of it are said to occur on the northern and eastern sides of Mount Shasta, and it is hoped that these reports may soon be verified.

Alpine Hemlock (*Tsuga mertensiana*).—S. N. L. Ellis reported three additional stations for this species in May, 1907, on the eastern slopes of the California Sierras. It is quite common in Green Creek, Mono County (T. 2 N., R. 24 E.), and near White Mountain at the head of Silver King Creek (T. 7 N., R. 22 E.), points well down the slopes of the mountains, while it was found in T. 8 N., R. 20 E., on the road from Big Tree to Carson, Nev. A single grove was found in February, 1907, by P. B. Kenneday (not of the Forest Service) on the east side of the Sierras, above Reno, Nev., on a north slope.

Lowland Fir (*Abies grandis*).—W. H. Kempfer has just reported, with specimens for verification, lowland fir at Plains, Montana, on Clarkes Fork of the Columbia River, north of the mouth of the Missoula River. This is another new point for the southern range of lowland fir in Montana. Karl W. Woodward finds this fir about Swan Lake, Montana, from which he has recently sent specimens, together with those of *Pinus monticola*, *P. murrayana*, *Picea canadensis*, *Pseudotsuga taxifolia*, *Juniperus scopulorum*, *J. communis*, *Betula papyrifera*, and *Populus trichocarpa*.

Macnab Cypress (*Cupressus macnabiana*).—A new intervening locality was discovered for this tree in April, 1907, between the Lassen Butte National Forest stations and the western end of the Siskiyou Mountains. P. T. Harris, who brought specimens for identification, found the grove at a point about 15 miles north of Mount Shasta, near Little Shasta River (Sec. 14, T. 45 N., R. 4 W.), where, he says, the cypress grows to a height of from 6 to 20 feet on "bare lava rocks, in pure stand, in dense thickets, and in an open stand." This report verifies in part the prediction that Macnab cypress would be discovered at a number of stations between the distant ones already established.

Port Orford Cedar (*Chamaecyparis lawsoniana*).—The range of this cedar is confined mainly to a narrow belt on the seaward side of the coast ranges of southern Oregon and northern California. It now seems probable that it extends eastward from its principal range in many isolated stations. A few such localities are known for it, such as one near Waklo, Josephine County, in the Siskiyou Mountains, Oregon. In 1899 a small grove was observed by M. C. Gannett on the headwaters of the Sacramento River, near Sisson, at an elevation of about 3,500 feet. One grove was recently seen also by P. T. Harris at the head of Halls Gulch (T. 37 N., R. 6 W.), a tributary of the East Fork of Trinity River, and other groves were found by him around Trinity Center at from 3,300 to 4,300 feet elevation.

Black Cottonwood (*Populus trichocarpa*).—The range of black cottonwood in Montana is still imperfectly known. Careful observations and specimens are needed to establish its exact occurrence in this region. It is known to exist in a few places only in the northern mountains, including Swan Lake, a station east of Flathead Lake, from which Karl W. Woodward has just sent a specimen.

Balm-of-Gilead (*Populus balsamifera*).—The southern limit of this poplar in Montana and Idaho has not yet been determined. It is mainly an eastern species which, in the mountain valleys of both States, occurs with the narrow-leaf and black poplars, while in Montana it extends eastward to the Little Rocky Mountains, probably also

to the Bighorns and southward as far as Bozeman and the Big Hole River. Its occurrence farther south, however, in the more western mountains and on the eastern lowlands of the Missouri and Yellowstone rivers is extremely doubtful. It has been observed in the northern mountains of Idaho, and possibly it extends to the ranges north of the Snake River Valley, yet positive proof of its occurrence there is lacking, as are also definite records for it in Nevada, Oregon, and Washington, from which it has been reported.

Long supposed to exist in the coast region of Alaska and the valley of Mackenzie River, balm-of-gilead has, through recent explorations of W. A. Langille and W. H. Osgood, of the Biological Survey, been discovered in the coast of Alaska at Cook's Inlet, to which it comes, from the Bering Sea forest, across the low base of the Alaskan Peninsula. They found it also on the north end of Kadiak Island and near the passes at the head of Lynn Canal. It should be looked for carefully along the seaward side of the coast ranges, where it has possibly been confused with *Populus trichocarpa*. Its northern range was lately extended above the Yukon Valley through field investigations of W. J. Peters and F. C. Schrader, of the U. S. Geological Survey, who discovered groves of this tree along the Anaktuvuk River (latitude 69° 20'), a branch of Colville River, in the Arctic watershed. This locality, the northmost one known, is 75 miles from the Arctic Ocean.

Toumey Oak (Quercus Toumeyi).—Heretofore this little-known oak has been found only in the Mule Mountains, southeastern Arizona. A new location for it, the Chiricahua Mountains, was reported in 1906 by H. D. Burrall, and in 1907 by J. S. Holmes. Mr. Holmes sent specimens of the tree to the Forest Herbarium with a statement that it occurs on the northwestern end of the Chiricahuas, on the west slope, at the head of Bonita Canyon and on White Tail Canyon, at elevations of about 6,000 to 6,200 feet.

Arizona Madroña (Arbutus arizonica).—The Arizona madroña has heretofore been known only in the Santa Catalina and Santa Rita mountains, southern Arizona, and southward on the Sierras of Chihuahua, Mexico. Recently, however, a number of new locations have been added in other mountains of southern Arizona. In 1894 Dr. N. L. Britton, of the New York Botanical Garden, and T. H. Kearney, of the Bureau of Plant Industry, collected specimens at Fort Huachuca, where it was recently observed also by R. S. Kellogg. Mr. Kellogg and H. D. Burrall reported it from the Chiricahua Mountains, at elevations between 6,000 and 7,900 feet, while Mr. Kellogg and W. R. Mattoon found this tree in Frye Canton, at 5,800 to 7,500 feet elevation, in the Mount Graham National Forest.

BRANCH OF GRAZING.

During the month of June, Mr. A. F. Potter, Assistant Forester, in charge of the Branch of Grazing, will be engaged in conferences with supervisors in Colorado.

All official letters from Forest officers should be addressed to the Forester, no matter what officer signed the letters to which they are replies. (See page 9, Service Order No. 106.) Each letter should bear upon one subject or one case only. (See page 132 of "The Use Book.")

Duplicates of Form 861 should be sent the Forester in all grazing trespass cases.

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Administrative Use of Timber—

Forest officers when submitting applications for the administrative use of timber by telephone companies should be careful to see that the applications contain the following clause:

“We do hereby grant to any and all members of the Forest Service of the United States Department of Agriculture, the free use of our telephone line for official business for a period of — years from the date of approval of this agreement, and agree to install for the official use of the employees of the said Forest Service at the office of the Forest Service at — and any other office or offices hereafter established in towns in which the lines of the said company already exist or to which they are extended, telephone instruments of the best quality furnished to any customers or patrons of said company, and to maintain the same in good serviceable condition for a period of — years without charge or toll, the line to be completed within — years from the date of approval of this agreement. We further agree that should the Forest Service build any lines within the aforesaid period, connection may be made with our existing or proposed lines at any point or points without charge or toll or extra expense whatever.”

Timber Sales for First Four Months of 1907—

The following table shows the amount and value of the timber applied for and sold from the National forests during January, February, March, and April, 1907, and also the totals for the year 1906:

1907.	Timber applied for.				Timber sold.			
	Feet B. M.	Cords.	Lineal feet.	Value.	Feet B. M.	Cords.	Lineal feet.	Value.
January ...	48,251,527	19,702	10,000	\$112,939.00	14,390,610	15,358	60,090	\$60,872.56
February ..	25,927,109	7,221	40,000	68,177.72	96,089,634	24,924	40,000	215,449.26
March	24,858,164	57,043	11,000	81,752.61	135,840,977	10,049	11,000	406,626.79
April.....	81,726,912	59,827	728,650	234,685.37	64,090,647	8,852	392,650	162,863.25
Total.....	180,763,712	143,793	789,650	497,554.70	310,411,868	59,183	503,650	845,811.86
Total in 1906	765,829,000	121,717	444,274	1,596,156.10	651,468,000	100,354	137,474	1,669,445.61

Cost of Marking Timber—

The following reports on the cost of marking timber for cutting have been received:

On the Shoshone Division of the Yellowstone, in a mixed stand of lodgepole pine and red fir, made up of small trees, marking has cost from 4 to 5 cents per thousand.

Marking on the Carbon Timber Company's sale in the Medicine Bow (Wyo.) National Forest, cost about 6 cents per thousand feet B. M. The timber is small, however, and climatic conditions were very unfavorable.

The cost of marking yellow pine in Arizona has been shown in one sale to be about 3 cents per thousand.

Sale of Hemlock—

Approximately 50,000,000 feet B. M. of Douglas fir, cedar, and hemlock in the Washington National Forest (West), is now being advertised under an application from Morse and Nestos, of Glacier, Wash. An important point in connection with this sale is the recognition by lumbermen of the value of hemlock. The minimum stumpage rate for this species named in the notice of sale is \$1.50 per M feet B. M.

Fort Wingate Timber Sale--

The Forest Service is cooperating with the War Department in the administration of a sale of approximately 25,000,000 feet B. M. of yellow pine in the Fort Wingate Military Reservation, N. Mex. The timber has been sold at a stumpage value of \$3.25 per M feet B. M.

Form for Reporting Free Use—

Form 874—14 is now available for distribution. This form is to be used by forest rangers in reporting to the forest supervisor when the amount of timber granted under a free-use permit has been cut and removed, and the free-use regulations complied with.

Timber Estimates—

In a number of recent timber sales the amount applied for has differed considerably from the amount included in the estimate. Where there is a material difference in these amounts the Forest officer should recommend definitely whether a sale should be made of a less amount than that specified in the timber estimate, giving in full his reasons. He should also give his definite opinion as to whether a sale could be made of the timber left if the application is approved unmodified. This information is necessary in order that the Washington office may act intelligently on the case without the delay incident to writing to the forest officer in charge for further information.

Special Uses with Timber Sales—

In a timber sale to Dunbar and Johnson, recently made in the Bitter Root (Mont.) National Forest, the timber sale contract provides for a railroad to be used in connection with the sale and thus does away with the necessity for a special use agreement.

When it can be foreseen that any special uses, such as sawmills, flumes, logging railroads, etc., will be used only in connection with timber sales, forest officers should include in their reports definite recommendations on such special uses, in order that the whole operation may be covered by one agreement and bond.

Convict Labor Barred—

In accordance with an order of the President, dated May 18, 1905, the following clause should be inserted in all timber sale applications and contracts:

“No person undergoing a sentence of imprisonment at hard labor can be employed in carrying out this contract.” (See Executive order, May 18, 1905.)

OFFICE OF SILVICS.

Accessions to the Library—Compiled by the librarian—

The current literature announced in this list consists of publications on file in the Service Library, and of those recently issued but not yet procured. Members of the Service are urged to report their needs of new literature to the librarian, when steps will be taken to secure it.

[* Literature not on file in the Library.]

Forestry—General—

- Forestry results in Germany; K. F. Geiser. 1907. 9 p. Illus. In World's work, N. Y., March, 1907.
- The making of a forest ranger; A. Chapman. 1907. 6 p. Illus. In Review of reviews, N. Y., April, 1907.
- Michigan—Forestry commission. Report, 1905-06. 214 p. Illus. Lansing, Mich.

Forest Botany—

- * Beitrag zur Morphologie von *Thuja occidentalis* (Contribution to the morphology of *Thuja occidentalis*); O. Knischewsky. 1905. 36 p. Illus. Zürich.
- Critical revision of the genus *Eucalyptus*; J. H. Maiden. Pt. 8, 1907. 44 p. Illus. New South Wales—Government, Sydney.
- * Herbar forestier de la France (Forest herbs of France); E. de Gayffier. 2 vols. Illus. L. Laveur, Paris. 600 Fr.
- * A key to the genera of woody plants in winter; K. M. Wiegand and F. W. Foxworthy. Ed. 2, 1906. 33 p. Published by the authors, Ithaca, N. Y.
- * Mikrographie des Holzes der auf Java vorkommenden Baumarten (The minute anatomical structure of the wood of the tree species of Java); H. H. Janssonius. 1907. E. J. Brill, Leiden.
- * Sections transversales de 120 espèces de bois (Transverse sections of 120 species of wood); A. Thil. L. Laveur, Paris. 40 Fr.
- * The trees of Great Britain and Ireland; H. J. Elwes and A. Henry. Pt. 1, 1906. 200 p. J. Edwards, Colesborne, Cheltenham.
- Trees of the pine family in Colorado; F. Ramaley. 1907. 14 p. Illus. In University of Colorado studies, February, 1907, vol. 4, no. 2.

Forest Geography—

- * Bäume und Wälder Schleswig Holsteins (Trees and forests of Schleswig-Holstein); W. Heering. 1906. 192 p. Lipsius & Tischer, Kiel.
- The forests of Arizona; S. M. Hall. 1906. 37 p. Illus. In Out west, Los Angeles, Dec., 1906, vol. 25, no. 6.
- The forests of Connecticut; A. F. Hawes. 1906. 10 p. Illus. In Connecticut magazine, New Haven, vol. 10, no. 2.
- Flora of Winnesheik Co.; B. Shimek. 1906. 78 p. From Annual report, 1905, Iowa geological survey, Des Moines.
- Mammals of the Mexican boundary of the United States; E. A. Mearns. 1907. 530 p. Bulletin 56 of Smithsonian institution, U. S. National museum.
- Contains a chapter on the trees of the region.

Silvics—

- Waldbauliche Studien über den Nussbaum und die Edelkastanie (Silvical studies of the walnut and chestnut); E. Böhmerle. 1906. Illus. W. Friek, Wien.
- * La disparition du chêne et l'introduction des résineux dans les taillis-sous-futaie. (The disappearance of the oak and the introduction of conifers in coppice with standards); H. Rosemont. 47 p. L. Laveur, Paris. 1 Fr.

Forest Management—

Lumbering—

- * Standard lumber reference book and code; B. F. Ulmer. Vol. 1, 1907. Illus. Southern states publishing co., Atlanta, Ga. \$3.
- * Les syndicats forestiers (Forest syndicates); P. Descombes. 1906. 15 p. F. Pech et Cie., Bordeaux.

Volume and Yield—

- * Cubage et estimation des bois (Cubic contents and valuation of wood); A. Goursaud. 182 p. L. Laveur, Paris. 1 Fr. 50.

Planting—

- Arbor day annual, 1907. 32 p. Illus. Dept. of education, Albany, N. Y.
- Arbor day proclamation of the President to the school children of the United States. 1907. 1 p. Washington, D. C.
- Suggestions for arbor day planting; J. J. Thornber. 1907. 4 p. Timely hints for farmers, no. 62, Arizona agricultural experiment station, Tucson, Ariz.
- Evergreens for the Iowa planter; A. T. Erwin and H. P. Baker. 1907. 46 p. Illus. Bulletin 90 of the Iowa agricultural experiment station, Ames, Iowa.
- Forest planting in Illinois; R. S. Kellogg. 1907. 32 p. Circular 81 of the Forest Service.
- Making a woodlot from seed; A. Knechtel. 1907. 7 p. N. Y. forest, fish, and game commission, Albany.
- * La mise en pratique du reboisement (The practice of reforestation); P. Descombes. 1906. 10 p. Impr. G. Gounouilhou, Bordeaux.

Forest Management—Continued.

Planting—Continued.

- * Petit manuel du propriétaire sylviculteur; peuplier/suisse blanc ou rouge [dit "Eucalyptus sarcé;" pin sylvestre; pin maritime; chêne; taillis] (Small manual for a grower of trees; poplar; Scotch pine; maritime pine; oak; coppice); L. Marion, 1906. 48 p. Illus. Impr. Monnoyer, Le Mans. 1 Fr.
- State nursery for forest tree seedlings; L. R. Jones. 1907. 10 p. Bulletin 127 of Vermont agricultural experiment station, Burlington, Vt.
- * Le reboisement dans la région des Cévennes (Reforestation in the region of the Cevennes Mts.); C. Broilliard. 1907. 20 p. Impr. E. Carrère, Rodez.
- * Le reboisement et les conditions économiques en montagne (Reforestation and economic conditions in the mountains); P. Bauby, 1907. 54 p. Impr. commerciale et industrielle, Bordeaux.
- * Traité pratique du reboisement et du gazonnement des montagnes (Practical treatise on reforesting and turfing the mountains); P. Demontzey. 528 p. Illus. L. Laveur, Paris. 15 Fr.
- * La Vallée de Barèges et le reboisement (The Valley of Barèges and reforestation); A. Campagne. 96 p. Illus. L. Laveur, Paris. 3 Fr.

Thinning—

- Historisches über den [Ringelungsversuch (History of girdling); M. Möbius. 1906? 13 p.
- * Influence des éclaircies dans les peuplements réguliers de sapin (Influence of thinnings on the regular regeneration of fir); E. Cuif. 122 p. Illus. L. Laveur, Paris. 3 Fr.

Organization and Administration—

- Amtliche Mitteilungen aus der Abteilung für Forsten des Königlich-preussischen Ministeriums für Landwirtschaft, Domänen und Forsten, 1905 (Notes concerning personnel of the Division of forestry, Dept. of agriculture, public lands and forests, of Prussia, for 1905). 1907. 45 p. J. Springer, Berlin.
- Annuaire des eaux et forêts pour 1907 (Yearbook of the Dept. of water and forests, of France, for 1907). 1907. 369 p. L. Laveur, Paris.
- Field program for May, 1907; the Forest service. 1907. 59 p.
- Hawaii—Division of forestry. Report, 1906, 1907. 137 p. Honolulu.
- India—Andaman Islands—Forest department. Progress report of forest administration for 1905-06. 32 p. Calcutta.
- Mitteilungen aus der Forst- und Kameralverwaltung des Grossherzogtums Hessen für das Jahr 1905 (Contributions from the Dept. of forestry and finance of Hesse for 1905). 1907. 31 p. Darmstadt.
- New South Wales—Dept. of lands—Forestry branch. Report, July 1, 1905, to June 30, 1906. 9 p. Illus. Sydney.

National and State Forests—

- Itasca state park; S. B. Green and E. G. Cheyney. 12 p. Illus.
- Location, date of latest proclamation, and area of the national forests in the United States, Alaska, and Porto Rico, Apr. 1, 1907; the Forest service. 1907. 4 p.

Utilization—

- * Combustibles industriels; houille, pétrole, lignite, tourbe, bois, charbon de bois, agglomérés, coke (Commercial fuels; coal, petroleum, lignite, peat, wood, charcoal, agglomerates, coke); F. Colomer & C. Lordier. Ed. 2, 1906. 571 p. Illus. Dunot et Pinat, Paris.

Technology—

- Quantity and character of creosote in well-preserved timbers; G. Alleman. 1907. 16 p. Circular 98 of the Forest service.

Statistics—

- Beiträge zur Forststatistik von Elsass-Lothringen (Contributions to the forest statistics of Alsace-Lorraine). No. 24, 1907. 126 p. Elsass-Lothringen—Abteilung für Finanzen, Gewerbe und Domänen, Strassburg.
- Timber supply of the United States; R. S. Kellogg. 1907. 16 p. Circular 97 of the Forest service.

Engineering—

Directions and specifications for building telephone lines on the national forests; the Forest service. 1907. 10 p. Illus.

Proceedings of Associations—

Appalachian mountain club. Register, 1907. 84 p. Boston.

Jahrbuch des Schlesischen Forstvereins für 1906 (Yearbook of the Silesian forestry association for 1906). 229 p. Illus. E. Morgenstern Verlagsbuchhandlung, Breslau.

Proceedings of the Connecticut forestry association. 1907. 56 p. Hartford, Conn.

Forest Zoology—

*Les animaux des forêts; mammifères, oiseaux (The animals of the forest; mammals, birds); R. Cabarrus. 280 p. Illus. L. Laveur, Paris. 2 Fr. 50.

Exhibitions—

Forestry; an exhibition illustrating the beauty of the trees, their growth, their cultivation and preservation, their usefulness to man, their part in literature and art; in the free public library of Newark, N. J. 1907. 12 p. Newark.

Arboretums—

*Arboretum national des Barres (The national arboretum at Les Barres); L. Pardé. 1906. P. Klincksieck, Paris.

Bibliographies—

List of books on trees and forests in the Newark library. 1907. 8 p. The free public library, Newark, N. J.

Irrigation—

Millions for moisture, an account of the work of the U. S. Reclamation service; C. J. Blanchard. 1907. 27 p. Illus. From National geographic magazine, Wash., D. C., April, 1907.

Periodicals—Articles of Special Interest—

Southern Lumberman, May 10, 1907.—An inquiry about Bois d'Arc (Osage Orange). p. 32; Renewing the Cedar Forests. p. 33.

The Timber Trades Journal, March 30, 1907.—Fashions in Wood. p. 744.

The Timber Trades Journal, May 4, 1907.—Crude oil as a timber preservative. p. 967.

The Timber Trades Journal, March 23, 1907 (Special Annual Issue).—The White Sea Timber Trade. p. 489; The Forests of Northern Russia. p. 491; The Timber Industry of the Argentine Republic. p. 501; The History of African Mahogany. p. 509; The Home Timber Trade of Ireland. p. 553.

American Lumberman, May 4, 1907.—Hardwood cut of the United States for 1906 graphically portrayed. p. 32; Quantity, consumption, and continuance of the timber of the U. S. p. 41.

American Lumberman, May 11, 1907.—Timber and Lumber legislation in British Columbia. p. 28; California Redwood versus White Oak for Cooperage stock. p. 30; The Cedar of New Jersey. p. 30; Mining for timber. p. 30; Michigan methods of measuring timber. p. 34; forestry applied to the farm. p. 38.

The St. Louis Lumberman, May 1, 1907.—Yellow pine as a veneer wood p. 67.

The Mississippi Valley Lumberman, May 10, 1907.—Trees, old and curious. p. 33.

The Mississippi Valley Lumberman, May 3, 1907.—The Waste of lumber. p. 22; Timber testing in Oregon discussed by the Oregon & Wash. Lumber Manufacturers' Association. p. 29.

The National Cooperage Journal, May, 1907.—Russian turpentine making. p. 17; Slippery Elm in cooperage. p. 17; The wooden pavement question. p. 20; The water in wood. p. 28; The forests of Norway (Report of Vice-consul Alger of Christiania). p. 30.

Southern Lumber Journal, May 1, 1907.—Average life of untreated railroad ties. p. 27; The fight for the forests. p. 35.

Hardwood Record, May 10, 1907.—The time for cutting hickory (From Sept. 1 to Jan'y. 15). p. 14; American Forest Trees; Pin oak. p. 16.

Periodicals—Articles of Special Interest—Continued.

- Canada Lumberman, and Woodworker, May 1, 1907.—Comparative Transverse Test of B. C. Douglas Fir and Georgia pine. p. 19; Methods of increasing durability of wood. p. 19; Canada's forest wealth. p. 25; The use of birch for interior finish. p. 26; Cost of handling lumber. p. 27.
- Wood Craft, May, 1907.—Statistics of Forest Products. p. 33; Strength of Douglas fir stringers. p. 39.
- The New York Lumber Trade Journal, May 1, 1907.—Tree felling device for lumbermen. p. 37.
- The Lumber Review, May 1, 1907.—New wood preservative (Electrical treatment with borax and rosin). p. 16; Buried Trees. p. 20.
- The Paper Mill and Wood Pulp News, April 27, 1907.—Wood pulp silk. p. 32.
- Southern Lumberman, April 25, 1907.—Juniper lumber of Florida. p. 33; Average life of untreated railroad ties. p. 33; A combined steel and wood cross-tie. p. 33.
- The American Telephone Journal, April 27, 1907.—The sterilization and preservation of poles. p. 271.
- Hardwood Record, April 25, 1907.—American Forest Trees; Pignut. p. 16; Maple sugar production. p. 24.
- American Lumberman, April 27, 1907.—A trip through the varied and extensive operations of the John L. Roper Lumber Co., in Eastern North Carolina and Virginia (illustrated). pp. 51-114.
- West Coast Lumberman, April, 1907.—The wooden pavement question, p. 518; Lumbering on the Yalu. p. 530c; Steaming timber before treating. p. 530c.
- Southern Industrial and Lumber Review, April, 1907.—Utilizing Waste Material. p. 26; Turpentine made from waste. p. 26; Economy in railroad uses of wood, by W. L. Hall. p. 32; New uses for cottonwood. p. 112.
- The Pacific Lumber Trade Journal, April, 1907.—Valuable chemicals from destructive distillation of Douglas Fir by the Puget Sound Wood Products Company. p. 14; Nondestructive Wood Distillation. p. 37.

OFFICE OF EXTENSION.**Camp Steeley Nursery—**

Last fall a ranger nursery was established at Camp Steeley in the Pocatello National Forest, Idaho. The seed was sown this spring, and the species used were Douglas fir, western yellow pine, Scotch pine, and lodgepole pine. There is a good opportunity for enlarging the seed beds, and Supervisor Wrensted has made specific recommendations that the nursery be increased to four times its present capacity, making a total seed bed area of two-fifths of an acre. The increased area is needed in order to secure an adequate basis for extensive forest planting on city watersheds.

The nursery site is favorably situated, since seedlings can readily be shipped to other National Forests in southern Idaho.

Frye Canyon Nursery—

A ranger nursery was established in the Frye Canyon, in the Mount Graham National Forest, about 12 miles southwest of Safford, Ariz. It is well situated at an altitude of about 6,700 feet. A portion of this nursery was sown with yellow pine and Arizona cypress seed last season, and a recent inspection shows that it now contains 18,000 western yellow pine seedlings. The beds that were not sown last year have been seeded this spring with western yellow pine and Arizona white pine collected in Arizona and sugar pine and Coulter pine collected in southern California. It is believed that these two southern California species will prove of considerable value for planting in the Mount Graham National Forest.

In order to determine the most desirable planting sites before the stock from the Frye Canyon Nursery is of sufficient size for planting, a small quantity of seedlings

were shipped from the Fort Bayard Planting Station early in April. These seedlings were planted on eight different sites, presenting a variety of exposures and soil conditions. A recent examination of this planting shows that the loss thus far is less than 10 per cent. The plantations at present appear promising, but the critical period upon which the success of field planting depends throughout the Southwest is unquestionably during the months of May and June.

Forest Planting in Irrigation Projects—

Mr. Siecke has begun the study of forest planting in irrigation projects on Government and private land in southern Idaho. The Twin Falls, Payette-Boise, and Minidoka projects are among those which will be studied to determine the best species for use in tree planting. Information thus secured will be the basis for practical assistance to settlers in this region.

Possibilities of Forest Planting in Ohio and Indiana—

The study of the possibilities of forest planting in Ohio is being rapidly carried forward. The northern and western portions of the State have been covered and much valuable data on plantations secured. A similar study will be carried out in Indiana during this month and both projects brought to completion before July 1. The results of the work will be embodied in one or more circulars.

Replies to Circular Letter (S. E.) of May 7—

The replies to this circular letter are being received. Additional information, especially concerning watersheds where planting is needed to improve the flow of streams directly supplying cities and towns, will be of great assistance to this Office. Such information may be embodied in a letter accompanying the reply form.

BRANCH OF PRODUCTS.

OFFICE OF WOOD UTILIZATION.

Timber Tests—

Tests made at the various timber-testing laboratories of the Forest Service form the basis for the following table:

Species.	Breaking strength in bending.	Breaking load concentrated midway between supports, for a beam 5" x 12" x 15'.
	<i>Lbs. per sq. in.</i>	<i>Pounds.</i>
Longleaf pine	7,772	20,700
Douglas fir	7,500	20,000
Western hemlock	5,783	15,400
Loblolly pine	5,580	14,900
Tamarack	4,562	12,300
Norway pine	3,975	10,600

These tests were made upon green bridge stringers. The first column of the table gives the average fiber stress at rupture of the different species in the green condition; the second column gives the greatest load that an average timber 5" wide, 12" high, with 15' between the supports, will hold if the load is concentrated midway between the supports. If, instead of being concentrated at one point, the load were uniformly

distributed over the entire length of the beam, the beam would hold twice as much, provided it did not fail in longitudinal shear. Short, deep beams are especially liable to fail in longitudinal shear. In order to insure safety in practice, beams are seldom allowed to carry more than one-sixth of their breaking load.

Computing—

In order to facilitate the construction of forest tables, supervisors are requested to have all forest measurement data of general value secured by forest assistants or rangers, such as stem analyses, heights, valuation surveys, etc., sent in to the office for the construction of tables by the Section of Computing. If the original data are desired for filing by the supervisor, copies should be sent in.

By combining data gathered by different men relating to the same species under the same growth conditions, the useless duplication of measurements will be avoided, and uniformity and greater accuracy will be attained in the construction of tables.

Form Factors of National Forest Trees—

From a large number of accurately measured trees the Forest Service has established the average form factor for lodgepole pine in Montana to be 0.53, with a range of from 0.58 for 6-inch trees to 0.42 for 22-inch trees. Douglas fir in Idaho and Wyoming varies from 0.58 for 10-inch trees to 0.40 for 40-inch trees, with an average of 0.49 for merchantable trees. The average form factor of western yellow pine in the Black Hills is 0.53, with but little variation. In the Sierras of California it is 0.42, with a range from 0.45 to 0.39 as extremes—a very small variation. In other words, western yellow pine in the Black Hills would be expected to give a scale of $\frac{53}{42}$ of the scale of a tree of the same dimension in the sugar pine-yellow pine belt of California. This would be more than $\frac{1}{4}$ more in the former region, and is further greatly increased by the closer cutting in the Black Hills, where better local markets are found for the lower grades of lumber.

Studies of National Forest Timbers—

The study of the properties, uses, and markets of the timbers found in the National Forests will be continued during the present season. Western larch, amabilis fir, incense cedar, and several other of the less used species will form the basis of this study. Tests will be made to determine the strength of the various species. These tests will supplement the field study, the object of which will be to discover the best uses and markets for these woods.

OFFICE OF WOOD PRESERVATION.

Loblolly Pine Cross-Arms—

The field work in the experimental treatment of loblolly pine cross-arms has recently been completed. In the fall of 1905 a cooperative agreement was entered into between the Forest Service and the American Telephone and Telegraph Company with the object of devising a system for preserving cross-arms and similar classes of material which would insure more desirable and economical results than were being obtained under the existing conditions. Timber cut during each month of the year was collected at the yards of a Norfolk (Va.) creosoting company, graded into three classes in accordance with the relative amounts of heartwood and sap-

wood each individual piece contained, and piled in various forms to season, conclusive results being obtained on the time required for the timber to become air dry under different conditions.

The experiments in the preservative treatment of the timber were then undertaken and have resulted very successfully, and it is believed that the method of handling and treating to be recommended to the cooperating company will result in their obtaining stronger, more durable, and cheaper timber. A full report of the experiment is now being prepared, from which an extract will be made for publication.

Open-Tank Treatment of Chestnut Poles—

During the past month an extensive series of experimental treatments of chestnut telephone poles was completed at Parkton, Md. The butts of the poles were immersed in successive hot and cold baths of creosote contained in open iron tanks, and in this way a satisfactory penetration by the preservative was secured. Experiments were made to determine the relative values of the hot and cold baths and the influence of other conditions. Later on the poles will be set in an experimental line, where the practical benefit of the treatment can be determined.

BRANCH OF OPERATION.

OFFICE OF MAINTENANCE.

Leather Sheaths—

When leather sheaths are wanted for marking hatchets or hammers, they must be specified in requisitions.

OFFICE OF ORGANIZATION.

Full Name in Recommendations for Appointment—

Supervisors in submitting recommendations for the appointment of rangers or guards should always give the full names of the men they desire appointed; not merely initials.

Rangers' Promotions—

A number of supervisors have recommended the promotion of rangers to take effect on dates other than January 1. It is sometimes necessary that such promotions be made, but no recommendations of this sort can be approved if made for reasons other than to offset increased living expenses caused by a change in district. It is very necessary that supervisors make recommendations for promotions on the 1st of January and at no other times except under these conditions.

OFFICE OF ENGINEERING.

Itinerary of Constructing Engineer—

W. E. Herring, Chief of the Office of Engineering, is in the field for a month's trip to confer with several supervisors in regard to the construction of several telephone lines and other improvement work upon the National Forests during the next fiscal year. It is hoped that arrangements may be made during his trip to start a large amount of telephone construction. Mr. Herring will visit the Gila National Forest, New Mexico, where 80 miles of line is to be built, the Black Mesa and San Francisco

National Forests, Arizona, where 80 miles of line is to be built, and the San Gabriel and San Bernardino National Forests in southern California, where about 138 miles of line may be built. It is probable that the construction of 45 miles of telephone line will also be authorized on the Santa Barbara National Forest.

While in southern California Mr. Herring will inspect the several power plants of the Edison Power Company at different points on the Kern River in Kern County, and will consult with them about the installation of meters in connection with the conservation charge to be made by the Service for power derived from streams in the National Forests.

Mr. Herring will visit Denver, Colo., on his return trip to consult with the Rocky Mountain Bell and the Colorado telephone companies relative to closing contracts with them for special rates over their lines and other concessions of like nature.

Circular on Building Telephone Lines—

A special circular has recently been issued entitled "Directions and Specifications for Building Telephone Lines on the National Forests," and copies have been sent to all the Supervisors. It is hoped that this circular will materially assist them in the construction of the telephone lines which will be undertaken during the next fiscal year.

Telephone Equipment in Quantity—

Contracts have been awarded by the Secretary of Agriculture to several commercial companies upon their informal bids to furnish the Forest Service with a large quantity of telephone wire, brackets, and insulators, for use in the construction of telephone lines upon the National Forests during the next fiscal year. Three thousand miles of No. 12 BB galvanized-iron wire will be furnished, with 105,000 standard pony insulators (No. 9 Hemingray), and 105,000 standard oak brackets. This material will be purchased from the special fund for improvement work on the National Forests, and will be furnished to supervisors upon requisition on Form 668 in the usual manner upon the Office of Engineering, Washington, D. C.

The purchase of telephone line material in quantity will effect a great saving of the improvement funds of the Service, and the material will be furnished supervisors with as little delay as possible. Except in special emergencies, supervisors should plan to supply the wire and other material needed for their Forests from this general purchase rather than to procure the necessary supply on their own accounts. For ready distribution two-thirds of the material will be shipped to Salt Lake City, Utah, and one-third to Denver, Colo., and it is expected that it will be delivered at the western supply points in time to be used during the remainder of the present fiscal year in telephone work already started upon several Forests.

New Forms for Construction Material—

Two new forms—227 and 228—will shortly be issued for use in connection with furnishing supervisors the wire, brackets, and insulators purchased in the manner explained in the preceding note. Upon the receipt in the Office of Engineering, at Washington, D. C., of requisitions from the supervisors, Form 227 will be used by the engineer to notify the chief inspector at Salt Lake City or at Denver to ship the material requisitioned to the supervisor. Form 228 will be filled out by the chief inspector at these points and returned to the Forester at Washington, D. C., upon the shipment of the material requisitioned. The new forms will be of a size suitable for mailing in small envelopes and a supply of the forms will be sent to the chief inspectors at Denver and Salt Lake City as soon as they are received.

Progress of Improvement Work—

Detailed estimates have been received from many supervisors, and considerable improvement work is already authorized upon many National Forests. The work already begun and the purchase of telephone-line material has taken up the greater part of the \$125,000 of the special improvement fund appropriated by Congress, which is available for use before the beginning of the fiscal year 1908.

OFFICE OF LANDS.
Ranger Stations—

The work of listing agricultural lands within National Forests is being retarded by failure of the forest officers to forward rapidly descriptions of the land which should be retained for rangers' headquarters, nursery sites, and other administrative purposes. The failure to make such reports has arisen largely from lack of study of the instructions.

Every forest officer should make careful study of the detailed instructions given in Forest Reserve Order No. 23 (consisting of parts 1, 2, and 3) and in National Forest Order 23 (consisting of part 4) and report at once what tracts are available and may be needed for administrative purposes.

The term Ranger Stations applies not only to rangers' headquarters, but also includes nursery sites. See page 4 of Forest Reserve Order No. 23 (part 1).

Forest officers in every case when forwarding diagrams for withdrawal of lands for administrative use should state in the letter of transmittal to the Forester the character of the land—whether mineral or nonmineral.

Agricultural Settlement under the Act of June 11, 1906—

Hereafter no duplicate reports will be required. In cases of appeal duplicate reports and map will be furnished by the Washington Office.

Special Uses—

In many special-use transactions the supervisors have sent to the applicant for execution not only the original and duplicate copies of the agreements prepared by the Forester for execution but also the supervisors' and rangers' copies. Only the original and duplicate copies should be sent to the applicants for execution. The supervisor's copy should always be kept in his file, and the signatures and dates of execution and approval should be filled in by him. The ranger's copy should be sent to the ranger at the same time the original and duplicate copies are sent to the applicant, because the letter of transmittal (Form 946) used by the supervisors in sending the original and duplicate copies to the applicant for execution notifies the applicant that he may begin enjoyment of the special use immediately upon executing and mailing both copies of the agreement and making any payment required, and the ranger should always have in his possession, at the time the applicant is entitled to begin his special use, a copy of the agreement showing exactly what permission has been given. The ranger may later, at his convenience, fill out his copy to show the dates of execution and approval.

SERVICE ORDERS.

SERVICE ORDER 135.

(Amends Service Order No. 106.)

Classification of Correspondence.

MAY 2, 1907.

Hereafter the correspondence of the Forest Service will be divided into three classes, to be known as (a) Service correspondence, (b) Branch correspondence, and (c) Office correspondence.

SERVICE CORRESPONDENCE.

The following classes of Service correspondence and documents will be signed only by the Forester or the Associate Forester:

1. Letters or papers dealing with or involving questions of policy affecting the entire Service.
2. Letters to Senators, Congressmen, high officials, or persons of unusual prominence.
3. Letters which, in the opinion of the assistant foresters in charge of branches, are of sufficient importance to require the signature of the Forester or the Associate Forester.
4. Very important contracts.

The following classes of correspondence and documents will be signed by the Assistant Forester in charge of the branch concerned, as Acting Forester:

1. Letters which relate directly to the business of a branch, but which must, in accordance with law or regulation, be signed by the Forester or Acting Forester.
2. Letters of authorization.
3. Contracts binding the Service, but not of sufficient importance to require personal attention by the Forester or the Associate Forester, and which follow established policies.

BRANCH CORRESPONDENCE.

Branch correspondence will be prepared for the signature of the Assistant Forester in charge, and will include the following classes:

1. Letters dealing with questions of policy affecting the branch, but not the Service as a whole.
2. Letters involving more than one office of the branch.
3. Letters pertaining to the work of the branch, addressed to officials of lesser rank or persons less prominent than those indicated under "Service Correspondence," paragraph 2.
4. Letters affecting the personnel of the branch.

OFFICE CORRESPONDENCE.

Office correspondence will be prepared for the signature of the Chief of Office and will include that which deals specifically with the work of the office, except as provided under "Branch correspondence."

OVERTON W. PRICE, *Associate Forester.*

SERVICE ORDER 136.

(Amends Service Order No. 106.)

Reference Key for Correspondence.

MAY 4, 1907.

Hereafter each letter written from the Forest Service in Washington to a member in the field will bear in the upper left-hand corner a typewritten initial or initials to designate the Branch or the Office in which it is written. Forest officers in charge of the National Forests, and other members of the Service away from Washington, should address all Service letters to The Forester, Forest Service, Washington, D. C., and refer to the key initial or initials on the letter answered, and its date. The following key will be used:

“F” The Forester; “AF” Associate Forester; “L” Law; “I” Information; “D” Dendrology.

“S” Silviculture; “SE” Extension; “SS” Silvics; “M” Management.

“P” Products; “PU” Wood Utilization; “PWP” Wood Preservation; “PP” Publication.

“G” Grazing; “GC” Control; “GD” Development; “GP” Permits.

“O” Operation; “OM” Maintenance; “OA” Accounts; “OO” Organization; “OE” Engineering; “OL” Lands; “OT” Purchase; “OS” Supplies; “OP” Photography; “OR” Record; “OB” Boundaries; “OH” Settlement; “OC” Claims; “OU” Special Uses.

OVERTON W. PRICE, *Associate Forester.*

SERVICE ORDER 137.

(Amends Service Order No. 106.)

Mailing of Correspondence.

MAY 4, 1907.

Each chief of office will designate a member of each section of the office in which letters are written, who will be responsible for the mailing of correspondence. To this member stenographers will deliver all letters to be signed, together with the addressed envelopes and inclosures. When received from stenographers, letters will be in the form prescribed under "Carbons and Initialing," Service Order 106, except that the signature stamp will be omitted from the carbons. The letters will be sent immediately for signature and the envelopes retained until the signed letters are returned. After signature, all letters will be returned directly to the member in charge of mailing.

In order to insure the prompt return of signed letters and the correct handling of inclosures, the following procedure will be followed:

The member in charge of mailing will keep on top of the desk a basket to be used exclusively for envelopes of letters which have been sent for signature. The envelopes will be kept in a separate package for each day's mail, secured by rubber bands, each package marked by a memorandum slip bearing the date.

When signed letters are not returned promptly, search will at once be made for them. If it is found that reason exists for holding up a letter temporarily, the envelope, with the date slip attached, will be retained in the desk basket, and inquiry made daily of the member responsible for the delay until the letter is either signed or canceled.

When a signed letter is returned, the member in charge of mailing will compare the carbon copies with the original letter to make sure that corrections on the original are reproduced on the carbon, and will also see that inclosures are made in accordance with the terms of the letter. The signature stamp of the signer will be affixed as the last step before sealing the envelope, except in the case of letters prepared for the signature of the Forester or the Associate Forester, when the stamp will be affixed by the Secretary to the Forester.

Before leaving for the day, the member in charge of this work will see that all letters ready for mailing are taken by a messenger. Stenographers and others who mail letters after the member in charge of the work has left for the day will also see that the letters are delivered to a messenger or watchman, and not held over until the next day.

OVERTON W. PRICE, *Associate Forester.*

NATIONAL FOREST ORDER.

NATIONAL FOREST ORDER 38.

Free Use.

MAY 31, 1907.

The annual statement for the free use business on each National Forest will hereafter be due in Washington on August 1 instead of January 20. Forest supervisors should therefore forward a statement of the free use business to the Washington Office not later than August 1 for the fiscal year ending June 30, 1907, and a separate statement for the six months ending June 30, 1907.

JAMES B. ADAMS, *Acting Forester.*

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United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR JULY, 1907.

This program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Principal Examiner.

HERBERT A. SMITH, Editor.

GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District No. 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, Chief Inspector, Missoula, Mont.

P. G. REDINGTON, Inspector, Missoula, Mont.

F. A. SILCOX, Inspector, Thompson Falls, Mont.

GEO. H. CECIL, Inspector, Miles City, Mont.

C. H. ADAMS, Inspector, Missoula, Mont.

Inspection District No. 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, Kansas, Southeastern Montana, and Southeastern Utah.

SMITH RILEY, Chief Inspector, Denver, Colo.

L. F. KNEIPP, Inspector, Denver, Colo.

R. P. IMES, Inspector, Denver, Colo.

T. D. WOODBURY, Inspector, Denver, Colo.

Inspection District No. 3.—Arizona, New Mexico, and Oklahoma.

D. D. BRONSON, Chief Inspector, Albuquerque, N. Mex.

T. S. WOOLSEY, Jr., Inspector, Albuquerque, N. Mex.

W. R. MATTOON, Inspector, Albuquerque, N. Mex.

J. K. CAMPBELL, Inspector, Washington, D. C.

Inspection District No. 4.—Utah, Southern Idaho, Western Wyoming, Eastern Nevada, and Northern Arizona.

R. E. BENEDICT, Chief Inspector, Salt Lake City, Utah.

F. W. REED, Inspector, Salt Lake City, Utah.

J. M. FETHEROLF, Inspector, Salt Lake City, Utah.

W. C. CLOS, Inspector, Salt Lake City, Utah.

Inspection District No. 5.—California and Western Nevada.

F. E. OLMSTED, Chief Inspector, San Francisco, Cal.

COERT DU BOIS, Inspector, San Francisco, Cal.

J. H. HATTON, Inspector, San Francisco, Cal.

WM. C. HODGE, Jr., Inspector, San Francisco, Cal.

G. W. PEAVY, Inspector, San Francisco, Cal.

Inspection District No. 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, Chief Inspector, Tacoma, Wash.

M. L. ERICKSON, Inspector, Tacoma, Wash.

W. H. B. KENT, Inspector, Tacoma, Wash.

F. E. AMES, Inspector, Tacoma, Wash.

WM. L. HALL, *Assistant Forester*, in the Office of the Forester; in charge White Mountain and Appalachian Investigation; Assistant, W. W. ASHE.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman and Special Inspector*, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. COX, Assistant Forester, in Charge.

OFFICE OF MANAGEMENT.

E. E. CARTER, Chief.

W. G. WEIGLE, Assistant Chief.

Timber Sales, E. H. CLAPP, in Charge.

G. M. HOMANS, Assistant.

P. T. HARRIS, Forest Assistant, Washington, D. C.

R. F. HAMMATT, Forest Assistant, Washington, D. C. Detailed from Organization.

A. B. RECKNAGEL, Forest Assistant, Washington, D. C.

Assignments for work on important sales under the direction of supervisors:

W. T. ANDREWS, Lumberman, Boise, Idaho.

J. S. BAIRD, Lumberman, Cass Lake, Minn.

G. P. BARD, Forest Assistant, Flagstaff, Ariz.

J. St. J. BENEDICT, Forest Assistant, Kalispell, Mont.

Assignments for work on important sales under the direction of supervisors—Cont'd.

M. BURNS, Lumberman, Cass Lake, Minn.
 GEO. L. COTT, Lumberman, Kalispell, Mont.
 W. G. DURBIN, Agent, Quincy, Cal.
 I. F. ELDREDGE, Forest Assistant, Northfork, Cal.
 GEORGE P. GREGG, Lumberman, Keystone, Wyo.
 C. A. GALARNEAU, Forest Assistant, Sisson, Cal.
 E. M. HAMILTON, Lumberman, Deadwood, S. Dak.
 J. P. HUGHES, Lumberman, Carson, Wash.
 W. E. LA FOUNTAIN, Lumberman, Northfork, Cal.
 W. R. MCKINNON, Lumberman, Cass Lake, Minn.
 S. L. MOORE, Forest Assistant, Kalispell, Mont.
 A. J. NORTON, Lumberman, Denver, Colo.
 H. C. NEEL, Forest Assistant, Deadwood, S. Dak.
 R. G. POND, Forest Assistant, Sonora, Cal.
 G. E. SAWYER, Forest Student, Sumas, Wash.
 F. X. SALZMAN, Lumberman, Cody, Wyo.
 R. Y. STUART, Forest Assistant, Wapiti, Wyo.
 W. S. UHLER, Lumberman, Anaconda, Mont.
 J. D. WARNER, Forest Assistant, Boise, Idaho.
 L. L. WHITE, Forest Assistant, Boise, Idaho.
 K. W. WOODWARD, Forest Assistant, Kalispell, Mont.
 I. T. WORTHLEY, Forest Assistant, Delta, Colo.

Cooperation, J. S. HOLMES, Acting in Charge.

PROJECTS.

Eastern States—

Examination of woodlots and timber tracts—WESLEY BRADFIELD, Washington, D. C.

Kentucky—

Study of forest conditions in cooperation with the State—J. S. HOLMES, Lexington.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Mexico—

Supervision of cutting, Fort Wingate Military Reservation, in cooperation with the War Department—J. G. PETERS, Guam, N. Mex.

Northeastern States—

Examination of woodlots and timber tracts—BENTON MACKAYE, 1524 Cambridge street, Cambridge, Mass.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Jr., Odanah.

Reconnaissance, S. J. RECORD, in Charge.

New Mexico—

Mill scale study of western yellow pine—LOUIS MARGOLIN, Santa Fe.

Examination of timberlands tributary to Cooney and Mogollon—W. D. STERRETT, Silver City.

Northwestern States—

Investigation of the supply of giant arborvitæ—S. J. RECORD, Kalispell, Mont.; assistant, J. REBMANN, Priest River, Idaho.

Forest Atlas, F. G. PLUMMER, in Charge.

Assignments for the instruction of rangers in surveying and mapping, under the direction of supervisors: D. C. HARRISON, Topographer, Kalispell, Mont.; C. C. BASSETT, Topographer, Delta, Colo.

OFFICE OF SILVICS.**RAPHAEL ZON, Chief.****Field Studies, RAPHAEL ZON, in Charge.****PROJECTS.****Colorado—**

Location and estimate of timber infested by the Black Hills beetle, the Engelmann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins, in charge)—W. D. EDMONSTON, Larkspur, Colo.

Ecological studies of the Colorado forests, with special reference to their life history and their reproduction after cutting or burning—Prof. FREDERIC E. CLEMENTS, Lincoln, Nebr.

Eastern States—

Study of the hickories—A. T. BOISEN, Bloomington, Ind.

Montana—

Study of cut-over areas of lodgepole pine—E. R. HODSON, Helena, Mont.

Pennsylvania and Virginia—

Study of second-growth yellow poplar in northern Virginia and eastern Pennsylvania—W. W. ASHE, Washington, D. C.

Library, H. E. STOCKBRIDGE, in Charge.

Compilation, E. H. FROTHINGHAM, in Charge.

OFFICE OF EXTENSION.**SAMUEL N. SPRING, Chief (in the Field).****L. C. MILLER, Acting Chief.****Planting, F. J. PHILLIPS, Acting in Charge.**

Assignments for work in nursery and planting under the direction of supervisors:

A. E. OMAN, Forest Assistant, Neihart, Mont.

W. D. HAYES, Forest Assistant, Pocatello, Idaho.

Reconnaissance, W. H. VON BAYER, in Charge.

PROJECTS.

Study of forest planting in irrigation projects in Southern Idaho—E. O. SIECKE, Pocatello, Idaho.

Study of forest planting in irrigation projects in South Dakota, Montana, and Wyoming—F. G. MILLER, Billings, Mont.

Study of watersheds in the White River National Forest—C. A. KUPFER, Meeker, Colo.

Study of forest planting in Mississippi—G. L. CLOTHIER, Agricultural College, Miss.

Preparation of plans for experimental planting on National Forests—W. H. VON BAYER, Deadwood, S. Dak.

Cooperation, S. B. DETWILER, in Charge.

PROJECTS.**California—**

Experimental planting—G. B. LULL, Collaborator, Sacramento, Cal.

Hawaii—

Experimental planting—R. S. HOSMER, Collaborator, Honolulu.

Kansas—

Addresses on forest planting, western Kansas, S. B. DETWILER, Manhattan, Kans.

Preparation of reports on forest planting in Ohio and Indiana—A. S. PECK, Washington, D. C.

BRANCH OF GRAZING.

A. F. POTTER, Assistant Forester, in Charge.

OFFICE OF CONTROL.

A. F. POTTER, Chief.

Allotment, L. F. KNEIPP.

Adjustment, JOHN D. LELAND.

Permits, ANNA P. KOSCHWITZ.

OFFICE OF DEVELOPMENT.

A. F. POTTER, Chief.

Fences, C. H. ADAMS, Missoula, Mont.

Forage, W. C. CLOS, Salt Lake City, Utah.

Water, J. K. CAMPBELL, Washington, D. C.

BRANCH OF PRODUCTS.

R. S. KELLOGG, Acting in Charge.

OFFICE OF WOOD UTILIZATION.

R. S. KELLOGG, Chief.

Computing, E. A. ZIEGLER.

Drafting, C. A. KOLB.

Wood Chemistry, H. S. BRISTOL, Acting in Charge.

Wood Uses, M. CLINE.

PROJECTS.

California—

Tests of the strength of eucalyptus and redwood, in cooperation with the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Study of the uses of tanbark oak—H. S. SACKETT, Berkeley.

Study of the uses of National-Forest woods—H. B. HOLROYD, Fresno.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistant, CORNELIUS BARRY.

Leaching studies—D. C. PARMELEE, Yale Station, New Haven.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN, ROLF THELEN, and J. O. BIXBY.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene; assistant, G. R. GESSERT.

Washington—

Tests of western hemlock and National-Forest woods, in cooperation with the University of Washington—O. P. GOSS, University Station, Seattle.

General Studies—

Washington office, timber tests—H. S. BETTS, Washington, D. C.; assistants, T. W. VENEMANN, and H. E. MCKENZIE.

Collection of statistics of forest products, in cooperation with the Bureau of the Census—H. M. HALE, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of lumber prices—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—W. C. GEER, Washington, D. C.

Study of chemical problems in wood utilization—ERNEST BATEMAN, Washington, D. C.; A. L. DEAN, 93 Broad street, Boston, Mass.

Studies in the heat conductivity of wood—FREDERICK DUNLAP, Washington, D. C.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief (in the Field).

W. F. SHERFESEE, Acting Chief.

PROJECTS.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistant, O. T. SWAN.

Montana—

The laying of an experimental track with western tamarack and Douglas fir to test the value of seasoning and treating, and of various devices for reducing the mechanical wear of the rails; in cooperation with the Northern Pacific Railway Company—H. B. EASTMAN, McGowan Hotel, Plains; assistant, W. H. KEMPFER.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

General Studies—

Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.

Study of creosote production—C. L. HILL, Washington, D. C.

Preparation of report on the experimental treatment of chestnut telephone poles—H. F. WEISS, Washington, D. C.

Correlation of data on the preservative treatment of American and foreign woods—M. C. JENSEN, Washington, D. C.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief.

Articles, T. CLEVELAND, Jr.

Review, FINDLEY BURNS.

Printing, QUINCY R. CRAFT.

Distribution, BRISTOW ADAMS.

PUBLICATIONS IN JUNE.

The Use Book: Regulations and Instructions for the Use of the National Forests (1907).

The Use of the National Forests.

Manual. Instructions for Making Forest Surveys and Maps.

Circular 21 (Fifth Revision). Practical Assistance to Farmers, Lumbermen, and Other Owners of Forest Lands.

Circular 36 (Third Revision). The Forest Service: What It Is, and How It Deals with Forest Problems.

Circular 99. Suggestions for Forest Planting on the Semi-Arid Plains.

Circular 100. Suggestions for Forest Planting in the Northeastern and Lake States.

- Circular 101. The Open-Tank Method for the Treatment of Timber.
 Circular 102. The Production of Red Cedar for Pencil Wood.
 Circular 103. Seasoning of Telephone and Telegraph Poles.
 Circular 104. Brush and Tank Pole Treatments.
 Circular 105. White Oak in the Southern Appalachians.
 Circular 106 (Forest Planting Leaflet). White Oak.
 Circular 107. Sawmill Statistics.

BRANCH OF OPERATION.

JAMES B. ADAMS, Assistant Forester, in Charge.

OFFICE OF ACCOUNTS.

GEORGE E. KING, Fiscal Agent and Chief.

Disbursing, E. A. MELZAR.

Bookkeeping, O. H. TIBBOTT.

Receipts, M. R. LATIMER.

OFFICE OF MAINTENANCE.

HERMON C. METCALF, Chief.

Purchase, H. C. TOWERS.

Record, H. C. METCALF.

Supplies, A. M. SMITH.

Photography, A. G. VARELA.

OFFICE OF LANDS.

G. F. POLLOCK, Chief.

Special Uses, M. J. McVEAN.

Claims, F. L. HARVEY.

Agricultural Settlement, W. J. MANGAN.

Status, J. B. SATTERLEE.

Boundaries, A. C. RINGLAND.

R. W. AYRES, South Pasadena, Cal.

C. J. BUCK, Yreka, Cal.

JOHN W. FARMER, Roosevelt, Ariz.

C. W. FITZGERALD, Hotel Franklin, Deadwood, S. Dak.

J. D. GUTHRIE, Chico, Cal.

LEE A. HARRIS, Kettle Falls, Wash.

PAUL D. KELLETER, Box 554, Deadwood, S. Dak.

STANTON G. SMITH, care D. D. BRONSON, Albuquerque, N. Mex.

H. O. STABLER, 310 Custom-House, Portland, Oreg.

L. WERNSTEDT, Wallowa, Oreg.

R. V. R. REYNOLDS, care R. E. BENEDICT, Salt Lake City, Utah.

R. PHILLIPS, care SMITH RILEY, Denver, Colo.

B. C. HEILMAN, care SMITH RILEY, Denver, Colo.

C. E. McMULLIN, care SMITH RILEY, Denver, Colo.

R. E. LYONS, care SMITH RILEY, Denver, Colo.

J. D. JONES, care E. A. SHERMAN, Missoula, Mont.

T. C. SPAULDING, care E. A. SHERMAN, Missoula, Mont.

CHARLES L. CASTLE, care R. C. McCLURE, Silver City, N. Mex.

OFFICE OF ENGINEERING.

W. E. HERRING, Chief.

J. H. CLARK, care R. E. BENEDICT, Salt Lake City, Utah.
GORDON EDSON, care ELMERS KOCH, Missoula, Mont.
E. E. LESLIE, care W. I. PACK, Provo, Utah.

OFFICE OF ORGANIZATION.

CHAS. S. CHAPMAN, Chief.
CLYDE LEAVITT, Assistant Chief.

PAGE S. BUNKER, Supervisor, District 1.
THOMAS HOGAN, Supervisor, District 2.
H. A. E. MARSHALL, Supervisor, District 3.
J. F. BRUINS, Forest Assistant, District 4.
R. L. P. BIGELOW, Supervisor, District 5.
C. H. FLORY, Forest Assistant, District 6.

NATIONAL FORESTS.

(Numerals following National Forests indicate Inspection Districts.)

ALASKA.

Alexander Archipelago and Afognak—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)

ARIZONA.

Baboquivari—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)
Black Mesa (North)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)
Black Mesa (South)—DRAYTON C. MARTIN, Acting Forest Supervisor, Clifton. (3)
Chiricahua—C. T. MCGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant. (3)
Dragoon—ROBT. J. SELKIRK, Acting Supervisor, Tucson; H. D. BURRALL, Forest Assistant.
Grand Canyon (North)—SELDEN F. HARRIS, Forest Supervisor, Fredonia; LORUM PRATT, Deputy Forest Supervisor. (4)
Grand Canyon (South)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)
Huachuca—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)
Mount Graham—THEO. T. SWIFT, Acting Forest Supervisor, Safford. (3)
Pinal Mountains—THEO. T. SWIFT, Acting Forest Supervisor, Safford. (3)
Prescott—F. C. W. POOLER, Forest Supervisor, Prescott. (3)
San Francisco Mountains—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)
Santa Catalina—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant. (3)
Santa Rita—ROBERT J. SELKIRK, Acting Forest Supervisor, Tucson; H. D. BURRALL, Forest Assistant. (3)
Tonto—W. H. REED, Forest Supervisor, Roosevelt. (3)
Tumacacori—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)

CALIFORNIA.

- Diamond Mountain**—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant. (5)
- Inyo**—A. H. HOGUE, Supervisor, Bishop. (5)
- Klamath**—W. B. RIDER, Acting Forest Supervisor, Yreka. (5)
- Lassen Peak**—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor; ALLAN R. POWERS, Forest Assistant. (5)
- Modoc**—C. E. RACHFORD, Acting Supervisor, Alturas. (5)
- Monterey**—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
- Pinnacles**—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
- Plumas**—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant. (5)
- San Bernardino**—R. H. CHARLTON, Forest Supervisor, Los Angeles. (5)
- San Gabriel**—R. H. CHARLTON, Forest Supervisor, Los Angeles.
Pasadena Planting Station—E. C. CLIFFORD, Pasadena. (5)
- San Jacinto**—J. R. BELL, Forest Supervisor, Hemet. (5)
- San Luis Obispo**—E. S. MAINWARING, Forest Supervisor, San Luis Obispo. (5)
- Santa Barbara**—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara. San Marcos Planting Station—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara. (5)
- Shasta**—G. A. COLEMAN, Forest Supervisor, Sisson. (5)
- Sierra (North)**—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS, Forest Assistant. (5)
- Sierra (South)**—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, Forest Assistant. (5)
- Sierra (East)**—A. H. HOGUE, Supervisor, Bishop. (5)
- Stanislaus**—S. L. N. ELLIS, Forest Supervisor, Sonora. (5)
- Stony Creek**—ERNEST BRITTEN, Acting Forest Supervisor, Elk Creek. (5)
- Tahoe**—MADISON B. ELLIOTT, Acting Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant. (5)
- Trabuco Canyon**—J. R. BELL, Forest Supervisor, Hemet. (5)
- Trinity**—F. H. HAFLEY, Forest Supervisor, Weaverville. (5)
- Warner Mountains**—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)

COLORADO.

- Battlement Mesa**—DAVID ANDERSON, Forest Supervisor, Collbran. (2)
- Cochetopa**—EUGENE WILLIAMS, Forest Supervisor, Saguache. (2)
- Fruita**—H. K. PORTER, Forest Supervisor, Delta. (2)
- Gunnison**—WM. B. KREUTZER, Forest Supervisor, Gunnison. (2)
- Holy Cross**—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; F. W. MORRELL, Forest Assistant. (2)
- Las Animas**—D. E. FITTON, Acting Supervisor, La Veta. (2)
- Leadville**—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant. (2)
- Medicine Bow (Colorado Division)**—SHEP N. HUSTED, Forest Supervisor, Estes Park. (2)
- Montezuma**—H. N. WHEELER, Forest Supervisor, Durango. (2)
- Ouray**—H. K. PORTER, Forest Supervisor, Delta. (2)
- Park Range**—F. D. WHITNEY, Acting Forest Supervisor, Kremmling. (2)
- Pikes Peak**—FRANK R. SHERWIN, Jr., Acting Forest Supervisor, Denver; W. J. MORRILL, Forest Assistant. (2). Pikes Peak Planting Station—J. F. KÜMMEL, Colorado City.

- San Isabel**—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2).
San Juan—F. C. SPENCER, Forest Supervisor, Monte Vista. (2).
Uncompahgre—H. K. PORTER, Forest Supervisor, Delta. (2)
Wet Mountains—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
White River—JAMES A. BLAIR, Forest Supervisor, Meeker. (2)

IDAHO.

- Bear River**—W. W. CLARK, Forest Supervisor, Logan, Utah; J. F. SQUIRES, Deputy Forest Supervisor. (4)
Bitter Root—F. A. FENN, Forest Supervisor, Kooskia. (1)
Caribou—J. T. WEDEMEYER, Acting Forest Supervisor, Idaho Falls. (4)
Cassia—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Cœur d'Alene—RICHARD H. RUTLEDGE, Acting Forest Supervisor, Wallace; DORR SKEELS, Forest Assistant. (1)
Henrys Lake—HOMER E. FENN, Forest Supervisor, St. Anthony; J. E. BARTON, Forest Assistant. (4)
Lemhi (North)—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
Lemhi (South)—GUY B. MAINS, Forest Supervisor, Mackay. (4)
Palouse—RICHARD H. RUTLEDGE, Acting Forest Supervisor, Wallace; ROY HEADLEY, Deputy Forest Supervisor; DORR SKEELS, Forest Assistant. (1)
Payette—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant. (4)
Pocatello—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Port Neuf—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Priest River—B. F. MCCONNELL, Forest Supervisor, Priest River; R. L. FROMME, Forest Assistant. (1)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Salmon River—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
Sawtooth—EMIL A. GRANDJEAN, Acting Forest Supervisor, Boise; C. E. DUNSTON, Forest Assistant. (4)
Weiser—JOHN B. LAFFERTY, Forest Supervisor, Weiser. (4)
Yellowstone (Idaho Division)—HOMER E. FENN, Forest Supervisor, St. Anthony; J. E. BARTON, Forest Assistant. (4)

KANSAS.

- Garden City**—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr. (2)

MINNESOTA.

- Minnesota**—G. E. MARSHALL, Forest Supervisor, Cass Lake. (2)

MONTANA.

- Big Belt**—R. W. STUART, Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant. (1)
Big Hole (North)—C. K. WYMAN, Acting Forest Supervisor, Dillon; ROBT. J. MOORE, Deputy Forest Supervisor. (1)
Big Hole (South)—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Big Hole (Anaconda Division)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; W. W. WHITE, Forest Assistant. (1)
Bitter Root (Montana Division)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant. (1)
Cabinet (North)—D. G. KINNEY, Forest Supervisor, Libby. (1)
Cabinet (South)—F. A. SILCOX, Acting Forest Supervisor, Thompson Falls. (1)

- Crazy Mountains**—E. C. RUSSELL, Forest Supervisor, Livingston. (1)
Ekalaka—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Elkhorn—R. W. STUART, Forest Supervisor, Townsend; M. N. STICKNEY, Forest Assistant. (1)
Gallatin—DAVID CONKLING, Forest Supervisor, Bozeman. (1)
Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant. (1)
Hell Gate (East)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; W. W. WHITE, Forest Assistant. (1)
Hell Gate (West)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant. (1)
Highwood Mountains—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
Kootenai—D. G. KINNEY, Forest Supervisor, Libby. (1)
Lewis and Clark (North)—F. N. HAINES, Forest Supervisor, Kalispell; Wm. H. DAUGS, Deputy Forest Supervisor. (1)
Lewis and Clark (South)—C. E. SCHOONOVER, Acting Forest Supervisor, Kalispell. (1)
Little Belt—IRA E. TODD, Forest Supervisor, Neihart. (1)
Lolo—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant. (1)
Long Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Madison—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Missoula—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Forest Assistant. (1)
Otter—GEO. H. CECIL, Acting Forest Supervisor, Miles City. (1)
Pryor Mountains—H. W. THURSTON, Acting Forest Supervisor, Cody, Wyo. (1)
Snowy Mountains—IRA E. TODD, Forest Supervisor, Neihart. (1)
Yellowstone (Absaroka Division)—E. C. RUSSELL, Forest Supervisor, Livingston. (1)

NEBRASKA.

- Dismal River**—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. Halsey Planting Station—WILLIAM H. MAST; assistant, LA MOREE BESLEY, Halsey. (2)
Niobrara—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. (2)
North Platte—C. A. SCOTT, Forest Supervisor, Halsey. (2)

NEVADA.

- Charleston**—DAVID BARNETT, Acting Forest Supervisor, Las Vegas. (4)
Independence—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Monitor—MARK G. WOODRUFF, Supervisor, Austin.
Ruby Mountains—CLARENCE N. WOODS, Acting Supervisor, Elko. (4)
Toiyabe—MARK G. WOODRUFF, Supervisor, Austin.
Toquima—MARK G. WOODRUFF, Supervisor, Austin.

NEW MEXICO.

- Big Burros**—R. C. MCCLURE, Forest Supervisor, Silver City; DOUGLAS RODMAN, Forest Assistant. (3)
Gallinas—J. H. KINNEY, Acting Forest Supervisor, Capitan. (3)
Gila (North)—JOHN KERR, Forest Supervisor, Magdalena. (3)
Gila (South)—R. C. MCCLURE, Forest Supervisor, Silver City; W. H. GODDARD, Deputy Forest Supervisor; DOUGLAS RODMAN, Forest Assistant. Fort Bayard Planting Station—W. B. HADLEY, Fort Bayard. (3)

- Guadalupe**—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo. (3)
Jemez—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. (3)
Lincoln—J. H. KINNEY, Acting Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Fort Stanton. (3)
Magdalena—JOHN KERR, Forest Supervisor, Magdalena. (3)
Manzano—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Mount Taylor—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Pecos River—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. Las Gallinas Planting Station—S. Y. PARNAY, East Las Vegas. (3)
Peloncillo—C. T. MCGLONE, Forest Supervisor, Paradise, Ariz. (3)
Sacramento—CHARLES H. HINDERER, Acting Forest Supervisor, Alamagorda. (3)
San Mateo—JOHN KERR, Forest Supervisor, Magdalena. (3)
Taos—ROSS McMILLAN, Forest Supervisor, Santa Fe. (3)

OKLAHOMA.

- Wichita**—W. R. MATTOON, Acting Forest Supervisor, Cache. (3)

OREGON.

- Ashland**—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Blue Mountains (East)—HENRY IRELAND, Acting Forest Supervisor, Sumpter; H. D. FOSTER, Forest Assistant. (6)
Blue Mountains (West)—A. S. IRELAND, Forest Supervisor, Prineville. (6)
Bull Run—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. CONOON, Forest Assistant. (6)
Cascade (North)—R. B. WILSON, Acting Forest Supervisor, Portland; A. E. CONOON, Forest Assistant. (6)
Cascade (South)—S. C. BARTRUM, Forest Supervisor, Roseburg. (6)
Coquille—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Fremont—GUY M. INGRAM, Acting Forest Supervisor, Lakeview. (6)
Goose Lake—GUY M. INGRAM, Acting Forest Supervisor, Lakeview. (6)
Heppner—THOMAS E. CHIDSEY, Acting Forest Supervisor, Heppner. (6)
Imnaha—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa. (6)
Siskiyou—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Tillamook—C. R. SEITZ, Acting Forest Supervisor, Eugene. (6)
Umpqua—C. R. SEITZ, Acting Forest Supervisor, Eugene. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash. (6)

SOUTH DAKOTA.

- Black Hills**—J. F. SMITH, Forest Supervisor, Deadwood; H. J. BROWN, Forest Assistant. (2)
Cave Hills—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Short Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Slim Buttes—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)

UTAH.

- Aquarius**—GEORGE H. BARNEY, Forest Supervisor, Escalante. (4)
Bear River—W. W. CLARK, Forest Supervisor, Logan; J. F. SQUIRES, Deputy Supervisor. (4)
Beaver—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Dixie—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George. (4)

- Fillmore**—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Fish Lake—N. E. SNELL, Forest Supervisor, Salina. (4)
Glenwood—N. E. SNELL, Forest Supervisor, Salina. (4)
Grantsville—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Manti—A. W. JENSEN, Forest Supervisor, Ephraim. (4)
Monticello—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Payson—DAN S. PACK, Forest Supervisor, Payson. (4)
Salt Lake—E. H. CLARKE, Forest Supervisor, Salt Lake City. (4)
 Wasatch Planting Station—N. J. FETHEROLF.
Sevier—TIMOTHY C. HOYT, Forest Supervisor, Panguitch. (4)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo; D. S. MARSHALL, Deputy Forest Supervisor; W. M. M. ANDERSON, Deputy Forest Supervisor. (4)
Vernon—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
Wasatch—E. H. CLARKE, Forest Supervisor, Salt Lake City. (4)

WASHINGTON.

- Colville**—W. W. CRYDER, Acting Forest Supervisor, Republic. (6)
Olympic—FRED HANSON, Forest Supervisor, Hoodspout. (6)
Rainier—G. F. ALLEN, Forest Supervisor, Orting. (6)
Washington (East)—G. W. MILHAM, Forest Supervisor, Chelan. (6)
Washington (West)—GEORGE B. COLEMAN, Forest Supervisor, Sumas; B. P. KIRKLAND, Forest Assistant. (6)
Washington (Yakima Division)—D. B. SELLER, Forest Supervisor, Wenatchee. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla. (6)

WYOMING.

- Bear Lodge**—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak. (2)
Big Horn—W. E. JACKSON, Forest Supervisor, Big Horn. (1)
Crow Creek—J. W. NELSON, Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant; J. E. KEACH, Forest Assistant. (2)
Medicine Bow—J. W. NELSON, Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant; J. E. KEACH, Forest Assistant. (2)
Sierra Madre—J. W. NELSON, Forest Supervisor, Saratoga; C. G. SMITH, Forest Assistant; J. E. KEACH, Forest Assistant. (2)
Yellowstone (Shoshone Division)—H. W. THURSTON, Acting Forest Supervisor, Cody. (1)
Yellowstone (Teton Division)—ROBERT E. MILLER, Forest Supervisor, Jackson. (4)
Yellowstone (Wind River Division)—ZEPH JONES, Forest Supervisor, Pine-dale. (4)

NATIONAL FORESTS NOT UNDER ADMINISTRATION.

District 1.—Little Rockies, Montana.

SERVICE CHANGES IN JUNE, 1907.

APPOINTED.

Forester—

APPALACHIAN STUDIES—

ALFRED AKERMAN, Forest Assistant.

WALTER MULFORD, Forest Expert.

Products—

WOOD UTILIZATION—

T. W. VENEMANN, Timber Testing Assistant.

H. E. MCKENZIE, Timber Testing Assistant.

J. O. BIXBY, Timber Testing Assistant.

O. E. HARING, Draftsman.

E. K. THOMPSON, Draftsman.

T. C. BROCK, Draftsman.

Silviculture—

MANAGEMENT—

D. C. HARRISON, Topographer.

C. C. BASSETT, Topographer.

Operation—

MAINTENANCE—

Miss BERYL G. GARDNER, Clerk.

NELSON A. OWENS, Clerk.

Miss CONSULLA ADAMSON, Clerk.

LANDS—

W. F. STALEY, Clerk.

ENGINEERING—

E. E. LESLIE, Lineman and Repairman.

ORGANIZATION—

District 1.

The following were appointed clerks in supervisors' offices:

E. VIOLET COOK, Hell Gate National Forest (East), Montana.

WINIFRED HOGAN, Bitter Root National Forest (Montana Division), Montana.

The following were appointed Forest Guards:

RALPH A. SMITH, Yellowstone National Forest (Absaroka Division), Montana.

JAMES KENNEDY, FRANK J. DAVIS, and HARRY C. SCHICK, Hell Gate National Forest (East), Montana.

WILLIAM C. BUTTERFIELD and FRANK D. WILLIS, Big Hole National Forest (North), Montana.

T. P. THOMAS, Lolo National Forest, Montana.

CHARLES BARTHOLF, Helena National Forest, Montana.

JAMES D. SHY, Otter National Forest, Montana.

R. N. WHITESITT and JERRY F. WILKERSON, Bitter Root National Forest, Montana.

JAMES P. FLYNN, Big Hole National Forest (South), Montana.

CHARLES COLLINS WALKLEY and RALPH H. BUSHNELL, Cabinet National Forest (South), Montana.

JAMES W. MCABEE, Priest River National Forest, Idaho.

WILLARD A. MALLERY, Palouse National Forest, Idaho.

GUY O'NEILL, Madison National Forest, Montana.

District 2.

The following were appointed Assistant Forest Rangers:

ELMER E. STEPHENSON and BENJ. F. SANDERCOOK, White River National Forest, Colorado.

JAS. M. LANGWORTHY, Montezuma National Forest, Colorado.

LAWRENCE J. ADAMS, Monticello National Forest, Utah.

RICHARD H. THOMPSON and E. A. POTTER, Holy Cross National Forest, Colorado.

The following were appointed Forest Guards:

WILLIAM L. BOSSE, Uncompahgre National Forest, Colorado.

ASA G. ARNOLD, Las Animas National Forest, Colorado.

SAM S. LINSOTT, Pikes Peak National Forest, Colorado.

LEE C. NEWPORT, Gunnison National Forest, Colorado.

JOHN D. GREEN, Holy Cross National Forest, Colorado.

G. START, J. P. WILLEY, FRANK B. NOTESTEIN, and HUGH CURRIE, San Juan National Forest, Colorado.

WILLIAM M. DARLEY, Ouray National Forest, Colorado.

WILLIAM W. SMITH, THOMAS ACORD, ERVIN BLUCK, and JOHN G. HAMPTON, Montezuma National Forest, Colorado.

District 3.

The following clerk was appointed in a supervisor's office:

MARJORIE POOLER, Prescott National Forest, Arizona.

The following were appointed Forest Guards:

WICH S. RUTH, Black Mesa National Forest, Arizona.

W. A. HALL, Magdalena National Forest, New Mexico.

A. B. ZUMWALT, Gallinas National Forest, New Mexico.

JOHN R. PLOWMAN and SAM A. BLOCKER, Guadalupe National Forest, New Mexico.

L. L. BUCK, T. B. LONGWELL, WM. P. JOHNSON, FRANK M. BRADFORD, A. J. CATHEY, and WILLIAM M. COHEA, Sacramento National Forest, New Mexico.

District 4.

The following clerk was appointed in a supervisor's office:

SUSIE A. COOK, Weiser National Forest, South Dakota.

The following were appointed Assistant Forest Rangers:

JOSEPH BARNETT, Payson National Forest, Utah.

WILLIAM A. CARLOW, Jr., Grand Canyon National Forest (North), Arizona.

JOSE BETENSON, Sevier National Forest, Utah.

The following were appointed Forest Guards:

E. H. PARRY, Sevier National Forest, Utah.

JULIUS MAELZER, Lemhi National Forest (South), Idaho.

MAURICE ASHTON, Salmon River National Forest, Idaho.

W. A. MOULTON, Yellowstone National Forest (Wind River Division), Wyoming.

A. M. AUSTIN, Yellowstone National Forest (Teton Division), Wyoming.

CHARLES A. BEAM, Yellowstone National Forest, Idaho.

LEO NELSON, Caribou National Forest, Idaho.

FRANK MOSS, CHESTER B. MORSE, FRANCIS MOSS, Henrys Lake National Forest, Idaho.

WM. R. DECKARD, GEORGE A. BROWN, R. L. HALE, CECIL HALL, L. F. SPAULDING, J. B. CUMMINGS, MELVIN MCCOY, and J. H. WOMELSDORFF, Sawtooth National Forest, Idaho.

W. W. IRWIN, WILLIAM THOMAS, CHARLES PORTER, and J. C. MONTEITH, Weiser National Forest, Idaho.

District 5.

The following clerk was appointed in a supervisor's office:

ALICE I. FLICKINGER, San Jacinto and Trabuco Canyon National Forests, California.

The following was appointed Assistant Forest Ranger:

JOHN S. REID, Trinity National Forest, California.

The following were appointed Forest Guards:

CLYDE RICKER, Lassen Peak National Forest, California.

JOHN NEW, San Luis Obispo National Forest, California.

N. B. DREW, Stony Creek National Forest, California.

CLARENCE A. CHAMBERLAIN, Trinity National Forest, California.

JAS. M. CHANDLER, WM. M. BROWN, and RALPH NODDIN, Sierra National Forest (North), California.

WILLIAM POWERS, CLARENCE ALLEN, J. W. STOCKTON, and FRANK BRANN, Sierra National Forest (South), California.

ERNEST A. FREEMAN, and C. C. METCALF, Shasta National Forest, California.

SAMUEL M. ELLIS, F. L. SHAW, and BERT DAILY, Stanislaus National Forests, California.

CHARLES D. THOMPSON, WASHINGTON C. FISHER, WILLIAM B. DARLING, GEORGE L. DE LANO, and C. B. MOORE, San Jacinto National Forest, California.

HENRY KEEFE, C. A. CAPREN, A. H. WALTON, W. R. STEAD, and JOHN W. PINGREE, Tahoe National Forest, California.

HARRY H. HUNT and EUGENE L. JOHNSON, Santa Barbara National Forest, California.

District 6.

The following was appointed a clerk in a supervisor's office:

OLLIE CANNON, Fremont National Forest, Oregon.

The following were appointed Forest Guards:

W. J. PATTERSON and F. P. PETTIT, Fremont National Forest, Oregon.

E. H. MAHN, M. THURMAN CANNON, VERNON V. HARPHAM, D. W. MYERS, C. C. COTTRELL, CLARENCE W. JACKSON, CLARENCE J. INGRAM, and J. W. KELSO, Cascade National Forest (South), Oregon.

WILLIAM SCHIEFFER, CHAUNCEY C. COFFMAN, ROY E. THOMAS, and GEORGE LEDFORD, Cascade National Forest (North), Oregon.

C. M. DENISTON, C. W. RAY, W. J. RYAN, J. H. BOLEN, and T. W. GREVE, Washington National Forest (Yakima Division), Washington.

JOHN SNOE and MAURICE HAMILTON, Washington National Forest (West), Washington.

NEWTON A. WILCOX, Washington National Forest (East), Washington.
 C. L. HEARSON and R. E. SMITH, Blue Mountains National Forest (East), Oregon.
 W. M. MORRAL and R. B. COMPTON, Rainier National Forest, Washington.
 JESSE DEWITT, Siskiyou National Forest, Oregon.
 L. D. HAMMOCK, Coquille National Forest, Oregon.
 ORLOFF A. STAFFORD, Heppner National Forest, Oregon.
 DANIEL ROBINSON, Colville National Forest, Washington.
 GEORGE E. LEACH, Tillamook National Forest, Oregon.
 THEODORE CADEL, Goose Lake National Forest, Oregon.
 OLE J. FORD and THOMAS RULE, Olympic National Forest, Washington.

APPOINTMENTS REVOKED.

Operation—

ORGANIZATION—

WELLS MCGOWAN, Forest Guard, Sawtooth National Forest, Idaho.
 G. N. BASSETT, Forest Guard, Sawtooth National Forest, Idaho.
 W. H. JONES, Forest Guard, Sawtooth National Forest, Idaho.
 J. S. J. NELSON, Forest Guard, Caribou National Forest, Idaho.
 GEORGE MCNULLEN, Forest Guard, Shasta National Forest, California.
 WILLIAM PARKER, Forest Guard, Sawtooth National Forest, Idaho.
 CHARLES B. EDWARDS, Forest Guard, Tonto National Forest, Arizona.
 H. W. HUNT, Forest Guard, Cascade National Forest (South), Oregon.
 E. H. MANN, Forest Guard, Cascade National Forest (South), Oregon.
 JOHN CRISS, Forest Guard, Park Range National Forest, Colorado.
 W. K. HUNTINGTON, Forest Guard, Sawtooth National Forest, Idaho.
 FRANK D. WILLIS, Forest Guard, Big Hole National Forest (North), Montana.
 W. A. MOULTON, Forest Guard, Yellowstone National Forest (Wind River Division), Wyoming.
 WILLIAM W. SMITH, Forest Guard, Montezuma National Forest, Colorado.
 IRA LONGBOX, Assistant Forest Ranger, San Juan National Forest, Colorado.
 ERNEST PACK, Assistant Forest Ranger, Monticello National Forest, Utah.
 JAMES E. WRIGHT, Forest Guard, Sawtooth National Forest, Idaho.
 FRANK MOSS, Forest Guard, Henrys Lake National Forest, Idaho.
 HOWARD HEDRICK, Forest Guard, Sawtooth National Forest, Idaho.
 CHARLES YOUNG, Forest Guard, Lewis and Clark National Forest (South), Montana.
 RICHARD GROOM, Forest Guard, Lewis and Clark National Forest (South), Montana.
 BENZ. S. FARNSWORTH, Assistant Forest Ranger, Cabinet National Forest (North), Montana.
 G. H. SWIFT, Forest Guard, Sawtooth National Forest, Idaho.
 CLYDE RICKER, Forest Guard, Lassen Peak National Forest, California.

APPOINTMENT TERMINATED.

Operation—

ORGANIZATION—

MABEL G. COPE, Clerk, Weiser National Forest, Idaho.

PROMOTED.

Operation—

ORGANIZATION—

ROSCOE G. WILSON, from Deputy Forest Ranger to Forest Ranger, and placed in charge of the Boboquivari, Huachuca, and Tumacacori National Forests, Arizona.
 CLARENCE W. FRYE, Assistant Forest Ranger, Sierra National Forest (South), California.

RESTORED FROM FURLOUGH.**Operation—****ORGANIZATION—**

GEORGE W. BOOKER, Assistant Forest Ranger, Teton Division Yellowstone National Forest, Wyoming.

WILLIAM J. BARR, Assistant Forest Ranger, Teton Division Yellowstone National Forest, Wyoming.

GLIDDEN J. BARSTOW, Assistant Forest Ranger, Teton Division Yellowstone National Forest, Wyoming.

FRED GRAHAM, Assistant Forest Ranger, Teton Division Yellowstone National Forest, Wyoming.

BENJ. F. BONDURANT, Assistant Forest Ranger, Teton Division Yellowstone National Forest, Wyoming.

JOHN D. ALSOP, Deputy Forest Ranger, Teton Division Yellowstone National Forest, Wyoming.

JAMES STUART, Assistant Forest Ranger, Bitter Root National Forest, Idaho.

CLYDE R. SEITZ, Deputy Supervisor, Umpqua and Tillamook National Forests, Oregon.

TRANSFERRED.**Operation—****ENGINEERING—**

F. E. JOY, Office of Engineering, Forest Service, to General Land Office.

GORDON EDSON, Lineman, from Madison National Forest to Bitter Root National Forest, Montana.

ORGANIZATION—

ROSCOE G. WILLSON, Deputy Forest Ranger, from Prescott National Forest to Huachuca, Tumacacori, and Baboquivari National Forests, Arizona, to assume charge.

HARVEY ABBEY, Assistant Forest Ranger, from Diamond Mountains National Forest to Plumas National Forest, California.

C. M. DOUGLASS, Forest Guard, from Mount Taylor National Forest to Manzano National Forest, New Mexico.

MARTIN L. MCALLISTER, Assistant Forest Ranger, from Sevier National Forest to Dixie National Forest, Utah.

E. F. MONTGOMERY, Clerk, from Sierra National Forest (North) to Stony Creek National Forest, California.

ISAAC W. DECKEB, Assistant Forest Ranger, from Gunnison National Forest, Colorado, to San Jacinto National Forest, California.

JOHN R. SMITH, Deputy Forest Ranger, from Washington National Forest (West) to Yakima Division of Washington Forest, Washington.

RESS PHILLIPS, Deputy Forest Ranger, from Organization to Boundaries.

JOHN GRAND, Forest Guard, from San Bernardino to San Gabriel National Forest, California.

JOHN D. JONES, Forest Ranger, from Organization to Boundaries.

R. B. JACKSON, Forest Guard, from Goose Lake to Fremont National Forest, Oregon.

F. J. STEELE, Forest Ranger, from Caribou to Henrys Lake National Forest, Idaho.

ARTHUR C. MCCAIN, Deputy Forest Ranger, from Lewis and Clark National Forest (South) to Otter National Forest, Montana.

A. O. WAHA, Forest Assistant, from Gila National Forest, New Mexico, to Inspection.

THOMAS C. SPAULDING, Forest Ranger, from Lolo National Forest to Boundaries.

- JOHN A. ANDERSON, Forest Guard, from Grand Canyon National Forest (South) to San Francisco Mountains National Forest, Arizona.
- DORR SKEELS, Forest Assistant, from Yellowstone National Forest (Teton Division) to Cœur d'Alene National Forest, Idaho.
- LEWIS J. MUNDELL, Assistant Forest Ranger, from Jemez National Forest to Lincoln National Forest, New Mexico.
- RICHARD P. IMES, from Black Hills National Forest, South Dakota, to Inspection.
- CHARLES E. McMULLIN, Forest Ranger, from Organization to Boundaries.
- ROBERT G. LYON, Assistant Forest Ranger, from Organization to Boundaries.
- C. A. DANIELS, Forest Guard, from San Francisco Mountains National Forest to Grand Canyon National Forest (South), Arizona.
- GEORGE L. PRATT, Forest Guard, from Grand Canyon National Forest (South) to San Francisco Mountains National Forest, Arizona.
- CLYDE R. SEITZ, Deputy Supervisor, from Blue Mountains National Forest (East) to Umpqua and Tillamook National Forest, Oregon.
- LESLIE E. SHIPP, Forest Guard, from Gila National Forest to Gila National Forest (North), New Mexico.
- AMASSA O. REYNOLDS, Forest Guard, from Gila National Forest to Gila National Forest (North), New Mexico.
- JOHN MUNDY, Forest Ranger, from Gila National Forest to Gila National Forest (North), New Mexico.
- WILLIAM H. CRISWELL, Forest Guard, from Gila National Forest to Gila National Forest (North), New Mexico.
- ROBERT GILLIES, Forest Guard, from Big Hole National Forest (South) to Big Hole National Forest (North), Montana.
- W. J. MORRILL, Forest Assistant, from Boundaries to Organization.
- R. O. LEWIS, Forest Guard, from Little Belt National Forest to Snowy Mountains National Forest, Montana.
- FRED C. HART, Forest Guard, from Snowy Mountains National Forest to Little Belt National Forest, Montana.
- ALEXANDER H. HOGUE, Supervisor, from Modoc and Warner Mountains National Forest to Inyo and Sierra (East) National Forests, California.
- HARVEY ABBEY, Assistant Forest Ranger, from Plumas National Forest to Lassen Peak National Forest, California.

LEAVE WITHOUT PAY.

Products—

WOOD UTILIZATION—

M. W. ELY, Clerk.

PUBLICATIONS—

ENOS A. MILLS, Forest Agent.

RESIGNED.

Forester—

LAW—

B. A. Gow, Clerk.

Products—

WOOD UTILIZATION—

ARTHUR L. DEAN, Expert.

Operation—

ACCOUNTS—

W. E. BLESSING, Clerk.

ORGANIZATION—

FREDERICK SIEWEKE, Forest Guard, Big Horn National Forest, Wyoming.

T. E. FITZGERALD, Clerk, Hell Gate National Forest (West), Montana.

ALBERT WHITNEY, Assistant Forest Ranger, Park Range National Forest, Colorado.

THOMAS LUCAS, Assistant Forest Ranger, San Gabriel National Forest, California.

R. B. MOORE, Forest Guard, Lemhi National Forest, Idaho.

FRANK AYERS, Forest Guard, Salmon River National Forest, Idaho.

HENRY L. JENNINGS, Forest Guard, Magdalena National Forest, New Mexico.

CHARLES C. WALKLEY, Forest Guard, Cabinet National Forest (South), Montana.

JOSEPH C. MADSEN, Assistant Forest Ranger, Payson National Forest, Utah.

ORLANDO HEDRICK, Assistant Forest Ranger, Lassen Peak National Forest, California.

JOHN W. GLOSSBRENNER, Deputy Forest Ranger, Gila National Forest, New Mexico.

CHARLES C. WRIGHT, Assistant Forest Ranger, Hell Gate National Forest (East), Montana.

FRED S. BROOKS, Forest Guard, Sierra National Forest (North), California.

JAMES L. BIXBY, Assistant Forest Ranger, Olympic National Forest, California.

FRANK E. AVERY, Forest Guard, Helena National Forest, Montana.

MYRON CAMPBELL, Forest Guard, Madison National Forest, Montana.

C. A. HAFFLY, Forest Guard, San Francisco Mountains National Forest, Arizona.

SUSPENDED.

Operation—

ORGANIZATION—

E. F. MORRISSEY, Forest Supervisor, Wichita National Forest, Oklahoma.

W. A. BRIGGS, Forest Guard, Cœur d'Alene National Forest, Idaho.

SEPARATED.

Operation—

ORGANIZATION—

JAMES H. JAMISON, Forest Guard, Yellowstone National Forest, Idaho.

WILLIAM A. STEWART, Assistant Forest Ranger, Innaha National Forest, Oregon.

J. W. McLAIN, Forest Ranger, San Francisco Mountains National Forest, Arizona.

WILLIAM O. POSTEL, Forest Guard, Yellowstone National Forest (Wind River Division), Wyoming.

SIM E. BROWDER, Assistant Forest Ranger, Cascade National Forest (North), Oregon.

ROBERT E. PEMBLE, Assistant Forest Ranger Teton Division, Yellowstone National Forest, Wyoming.

SERVICE NOTES FOR JULY.

OFFICE OF THE FORESTER.

Executive Order—

Whereas, by an Executive Order of January 17, 1873, it was declared that “persons holding any Federal civil office by appointment under the Constitution and the laws of the United States will be expected, while holding such office, not to accept or hold any office under any State or Territorial government, or under the charter or ordinances of any municipal corporation”;

And whereas it is expedient that the Federal and State Governments should cooperate for the better enforcement of the laws with regard to the forests and the protection of fish and game;

And whereas the Congress, in Acts passed June 30, 1906 (34 Stats., 669, 683) and March 4, 1907 (34 Stats., 1256, 1269), has directed that “hereafter officials of the Forest Service designated by the Secretary of Agriculture shall, in all ways that are practicable, aid in the enforcement of the laws of the States or Territories with regard to stock, for the prevention and extinguishment of forest fires, and for the protection of fish and game”;

And whereas it seems that such cooperation can, in many instances, be best effected by allowing officers and employees of the Forest Service and Biological Survey of the United States Department of Agriculture to accept certain State and Territorial appointments and certain State and Territorial officials to receive appointments in the said Forest Service and Biological Survey:

Now, therefore, in consideration of the premises, I deem it proper to give public notice that hereafter State and Territorial foresters, and their technically trained assistants, unless prohibited by the laws of the State or Territory, may be allowed to serve as collaborators in the Federal Forest Service, and that officers and employees of the said Forest Service and Biological Survey may, with the approval of the Secretary of Agriculture, accept appointments to positions on State and Territorial forest commissions and boards and to such other State and Territorial positions as will empower them to enforce or assist in enforcing the local forest, stock, and game laws, provided the services to be rendered under such appointments do not interfere with the duties of their Federal employment.

THEODORE ROOSEVELT.

THE WHITE HOUSE, *June 13, 1907.*

The Use Book—

The opinion of Judge Beatty in the case of *United States v. Domingo et al.*, which is printed in full in the 1907 Use Book, pages 208–210, has appeared in the Federal Reporter since the compilation of The Use Book. The citation is 152 Federal Reporter, page 566. The citation for the case of *United States v. Daguirre* (The Use Book, p. 210) is 152 Federal Reporter, 568.

Teller Trial—

The trial of the criminal case of United States *v.* John C. Teller, timber trespass, is set for July 22 at Cheyenne, Wyo.

Mr. Shaw's Itinerary—

Mr. A. C. Shaw will visit Grants Pass, Oreg., prior to July 1. After July 5 he will be located indefinitely at Susanville, Cal.

DENDROLOGIST.**Notes on the Distribution of Forest Trees—**

Whitebark pine (*Pinus albicaulis*).—Whitebark pine had not been known east of the Mount Shasta region in northern California until it was seen in 1904 by R. T. Fisher just north of Mount Shasta, on the high peaks above 8,000 feet and immediately east of Shasta Valley, and by S. J. Flinam, in 1906, along timber line on the west slope of Warner Mountains, in the northeastern corner of the State, at elevations from 9,000 to 10,000 feet. The southern limits of this pine in the Sierras, as determined by Geo. B. Sudworth, are the high mountain slopes between the head of East Fork of Kern River and Crab Tree Creek at 12,000 feet, and at the head of Little Kern River. There may possibly be more southern stations, and specimens from this little-known region are greatly desired. On the eastern slopes of the Sierras it was also found in 1906 on Mount Rose near Reno, Nev., by P. B. Kennedy (not of the Forest Service), and probably occurs elsewhere on the eastern side of the Sierras, though records of it are lacking. Whitebark pine occurs on several high peaks of the southern California Coast Ranges, but its exact range there is not fully known. Specimens and notes from the San Bernardino and San Jacinto mountains are desired. It has also been reported in the high mountains of southern Idaho and northern Utah, and also as far east in Montana as the Bear Paw Mountains (east of the Continental Divide) by A. F. Potter, H. F. Studley, Smith Riley, F. W. Reed, and J. H. Hatton. Specimens from these localities are also greatly desired.

Lowland fir (*Abies grandis*).—Dr. C. Hart Merriam (of the Biological Survey) discovered this fir in a narrow strip of the Coast pine, *Pinus contorta*, north of Fort Ross, in Sonoma County, Cal. This, for the present, must be considered its southern limit.

Red fir (*Abies magnifica*).—J. Rebmman reported for red fir the most southern limit recorded in the Sierras, where he found it in the Greenhorn Mountains, at the head of Lumreau Creek (a tributary of Poso Creek), sections 12, 13, 11, 14, of T. 26 S., R. 31 E., at from 4,500 to 6,650 feet elevation.

Redwood (*Sequoia sempervirens*).—The most eastern limit for the Coast redwood, and the only point known on the east slopes of the Coast Range, is near the town of Willets on Deep Creek, Mendocino County, where S. J. Flintham observed the tree in 1905.

MacNab cypress (*Cupressus macnabiana*).—A new grove of this cypress, and the farthest north of any of the Lake County groves, was discovered in 1902 by W. W. Mackie; the information has only just been received. The trees are scattered along Bartlett Creek, in the Stony Creek National Forest, from Horse County southward.

Rocky Mountain juniper (*Juniperus scopulorum*).—The eastern limits of this species are, in general, the eastern foothills of the Rocky Mountains, from Alberta to western Texas, but it has been recently noted in Oklahoma by W. J. Gardner and G. L. Clothier. Further investigation of the Black Hills (South Dakota) juniper may prove it to be this species.

California juniper (*Juniperus californica*).—This tree had not been observed in the Sierras north of Kernville on Kern River until Geo. B. Sudworth found it growing abundantly as far up the South Fork of Kern River as 7 miles below Monache Meadow.

Goldenleaf chinquapin (*Castanea chrysophylla*).—Heretofore this tree has not been known in Oregon except on the Cascade Range, but J. B. Leiberger found it in 1899 as a shrub on the Klamath-Des Chutes divide to the east, and W. T. Cox discovered it in 1903 in the southern Coast Range of Oregon in the present Siskiyou National Forest. The extension is of very great interest.

Garry oak (*Quercus garryana*).—Previously not known east of Trinity National Forest, this tree was reported by A. R. Powers in the foothills of the Plumas, Diamond Mountain, and Lassen Peak National Forests. Further careful field observations are likely to reveal other outlying stations.

Engelmann oak (*Quercus engelmanni*).—E. A. Mearns (not of the Forest Service) has very recently reported this species occurring a short distance beyond the Mexican line, in lower California. Heretofore it has not been known farther south than the mesa back of San Diego.

Blue oak (*Quercus douglasii*).—Blue oak was reported by F. G. Plummer and M. G. Gowsell in 1905, and by J. H. Hatton in 1906, in the southern California Coast Ranges, in the watersheds of the Santa Ynez and Santa Maria rivers of the northwestern part of the Santa Barbara National Forest, a locality in which it has not been previously known. It is known, however, to occur a little farther north in the northern part of the San Luis Obispo National Forest on the northern slopes of the Sierra Liebre range, and in San Fernando Valley on the southern slopes of the San Gabriel Mountains. Specimens or notes from this general locality are greatly desired, as well as information concerning the northern extent of this oak in the Sacramento Valley and in the Coast Ranges, where it is known at present only as far as Redding and Mendocino County.

Notes and Specimens Desired—

The Coast Ranges of Oregon and southern California have not been carefully explored for the little known or unknown trees which they doubtless contain. In Oregon the exact northern limit in the Coast Ranges of sugar pine, white fir (*Abies concolor*), goldenleaf chinquapin, California black oak, and a number of other trees, is unknown, while in California the exact southern limits of such Coast species as Sitka spruce, western hemlock (*Tsuga heterophylla*), yellow cedar, and Lawson's cypress, as well as the western or northern limits of various California oaks and junipers, are all yet to be determined. It is hoped that National Forest officers and others will assist in completing our knowledge of the range of these trees by contributing notes and specimens.

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Check Scaling Results—

The work of check scaling on the Black Hills National Forest conducted by Assistant Lumberman Hamilton, under the direction of Supervisor Smith, has shown that in the cases of two of the officers the check scale varied from the original scale only one-tenth of 1 per cent. This accurate work is to be highly commended, and it is hoped that the check scaling on other Forests will show equally good results.

Forester's Sales—

In Forester's sales, as soon as one publication of the notice of sale has been made, the Forest officer in charge should send the applicant and other prospective bidders a copy of Form 941 with a clipping of the notice of sale attached, together with instructions that bids should be submitted promptly. This is necessary in order that the bids may be received in Washington before the date fixed by the notice of sale as the last day for receiving bids. Bidders frequently fail to give the location of the timber and the different kinds and species included in the sale.

At the same time, Form 935 should be sent to the Forester.

Insect-Infested Timber, Black Hills National Forest—

Under the General Notice of Sale dated February 4, 1907, sixteen sales of insect-infested timber have been made, disposing of 10,100,000 feet B. M. of saw timber and 2,200 cords of wood. A price of \$1 per thousand feet B. M. for saw timber and 25 cents per cord for cordwood has been obtained.

Advance Payments—

All timber sale contracts require that payment shall be made in definite amounts in advance of cutting. This regulation should be construed to mean that payments should be made in advance of cutting rather than of scaling. A number of cutting reports have been received recently in which it is evident that Forest officers, in requiring payments, have not taken into consideration the amount of material cut but not scaled.

Timber Sales Running Over Two Years—

All timber sale contracts in which the period allowed for the completion of the sale is more than two years should provide that a definite part of the total estimated amount of timber be cut and removed each year.

Sale of Douglas Fir, Cedar, and Hemlock—

Two bids have been received for approximately 35,854,000 feet B. M. of Douglas fir, 6,229,000 feet B. M. of cedar, and 2,839,000 feet B. M. of hemlock, recently advertised in the Washington National Forest (West). The highest bid, \$2.43 per thousand feet B. M. for fir, \$2.10 per thousand feet B. M. for cedar, and \$1.50 per thousand feet B. M. for hemlock, was submitted by the Bolcom-Riley Logging Company, of Sumas, Wash. There are no special conditions in connection with the sale, and the bid was based entirely upon the recognized market value of the timber.

OFFICE OF SILVICS.**Timber-Destroying Fungi—**

Mr. K. W. Woodward recently sent in specimens of a fungus which he found very prevalent on balsam and hemlock in the Lewis and Clark National Forest. The specimens were identified as *Echinodontium tinctorum*, a little-known species, upon the life history of which practically nothing has been written. It is exceedingly desirable that Forest officers report the occurrence of destructive fungi attacking forest trees on the National Forests and, wherever possible, submit specimens of the

fruiting bodies to this Office. The specimens will be identified and all available information regarding their life history and the extent of damage they are capable of doing will be supplied.

Silvical Data on File—

The section of Compilation has now on file silvical data on 180 species, including practically all the western forest trees and many of the chaparral species. The following species have been added to the lists printed in the February and March numbers of the Field Program:

CONIFERS.

Tamarack (<i>Larix laricina</i>).	Monterey cypress (<i>Cupressus macrocarpa</i>).
Weeping spruce (<i>Picea breweriana</i>).	Gowen cypress (<i>Cupressus goveniana</i>).
Black spruce (<i>Picea mariana</i>).	Pygmy cypress (<i>Cupressus pygmaea</i>).
White spruce (<i>Picea canadensis</i>).	MacNab cypress (<i>Cupressus macnabiana</i>).
Bigcone spruce (<i>Pseudotsuga macrocarpa</i>).	Dwarf juniper (<i>Juniperus communis</i>).
Bristle-cone fir (<i>Abies venusta</i>).	Utah juniper (<i>Juniperus utahensis</i>).
Redwood (<i>Sequoia sempervirens</i>).	

HARDWOODS.

Fanleaf palm (<i>Neorushingtonia filamentosa</i>).	California scrub oak (<i>Quercus dumosa</i>).
Joshua-tree (<i>Yucca arborescens</i>).	Canyon live oak (<i>Quercus chrysolepis</i>).
Mohave yucca (<i>Yucca mohavensis</i>).	California live oak (<i>Quercus agrifolia</i>).
California walnut (<i>Juglans californica</i>).	Highland oak (<i>Quercus wislizeni</i>).
California wax myrtle (<i>Myrica californica</i>).	Morehus oak (<i>Quercus morehus</i>).
Black willow (<i>Salix nigra</i>).	(<i>Quercus tomentella</i> .)
Smoothleaf willow (<i>Salix laevigata</i>).	(<i>Quercus pricei</i> .)
Western black willow (<i>Salix lasiandra</i>).	Hackberry (<i>Celtis occidentalis</i>).
Lyall willow (<i>Salix lasiandra lyallii</i>).	Palo blanco (<i>Celtis occidentalis reticulata</i>).
Longleaf willow (<i>Salix fluviatilis</i>).	California laurel (<i>Umbellularia californica</i>).
Silverleaf willow (<i>Salix sessilifolia</i>).	Santa Cruz ironwood (<i>Lyonothamnus floribundus</i>).
Bigelow willow (<i>Salix lasiolepis</i>).	California sycamore (<i>Platanus racemosa</i>).
Nuttall willow (<i>Salix nuttallii</i>).	Oregon crab (<i>Malus rivularis</i>).
Hooker willow (<i>Salix hookeriana</i>).	Western serviceberry (<i>Amelanchier alnifolia</i>).
Silky willow (<i>Salix sitchensis</i>).	Black haw (<i>Crataegus douglasii</i>).
Fremont cottonwood (<i>Populus fremontii</i>).	Christmas berry (<i>Heteromeles arbutifolia</i>).
Western birch (<i>Betula occidentalis</i>).	Pacific plum (<i>Prunus subcordata</i>).
(<i>Betula kenaica</i>).	Bitter cherry (<i>Prunus emarginata</i>).
(<i>Betula alaskana</i>).	Western choke cherry (<i>Prunus demissa</i>).
White alder (<i>Alnus rhombifolia</i>).	Hollyleaf cherry (<i>Prunus ilicifolia</i>).
Paperleaf alder (<i>Alnus tenuifolia</i>).	Entire-leaf cherry (<i>Prunus ilicifolia integrifolia</i>).
Red alder (<i>Alnus oregona</i>).	Screwbean (<i>Prosopis odorata</i>).
Sitka alder (<i>Alnus sitchensis</i>).	Mesquite (<i>Prosopis juliflora</i>).
Goldenleaf chinquapin (<i>Castanopsis chrysophylla</i>).	Western redbud (<i>Cercis occidentalis</i>).
California white oak (<i>Quercus lobata</i>).	Devils claw (<i>Acacia greggii</i>).
Shin oak (<i>Quercus breweri</i>).	Horse-bean (<i>Parkinsonia aculeata</i>).
Pacific post oak (<i>Quercus garryana</i>).	Small-leaf horse-bean (<i>Parkinsonia microphylla</i>).
California rock oak (<i>Quercus douglasii</i>).	
Engelmann oak (<i>Quercus engelmannii</i>).	

Palo verde (<i>Cercidium torreyanum</i>).	Cascara buckthorn (<i>Rhamnus purshiana</i>).
Indigo thorn (<i>Dalea spinosa</i>).	Blue myrtle (<i>Ceanothus thursiflorus</i>).
Sonora ironwood (<i>Olneya tesota</i>).	Tree myrtle (<i>Ceanothus arboreus</i>).
Canotia (<i>Canotia holacantha</i>).	Pacific dogwood (<i>Cornus nuttallii</i>).
Fremontia (<i>Fremontodendron californicum</i>).	(<i>Garrya elliptica</i>).
Western sumac (<i>Rhus integrifolia</i>).	Madrona (<i>Arbutus menziesii</i>).
Oregon maple (<i>Acer macrophyllum</i>).	(<i>Fraxinus coriacea</i>).
Vine maple (<i>Acer circinatum</i>).	Oregon ash (<i>Fraxinus oregona</i>).
Dwarf maple (<i>Acer glabrum</i>).	Leatherleaf ash (<i>Fraxinus velutina</i>).
California boxelder (<i>Acer negundo californicum</i>).	(<i>Fraxinus dipetala</i>).
California buckeye (<i>Aesculus californica</i>).	Desert willow (<i>Chilopsis linearis</i>).
Evergreen buckthorn (<i>Rhamnus crocea</i>).	Button-bush (<i>Cephalanthus occidentalis</i>).
	Mexican elder (<i>Sambucus mexicana</i>).
	Pale elder (<i>Sambucus glauca</i>).

Since only three typewritten copies of the notes have been made, it is impossible to distribute them permanently. They are, however, freely available to technical men in Washington and for temporary use by Forest officers on the National Forests.

New Forest Literature—Compiled by the Librarian.

The publications announced in this list consist of those on file in the Service library, and of those recently issued but not yet procured. Members of the Service are urged to report their needs of new literature to the librarian, when steps will be taken to secure it.

Books marked with an asterisk (*) not on file in the library.

Forestry—General—

Economie forestière suisse en 1906 (Forest economy in Switzerland in 1906); P. Bertholet. 1907. 15 p.

Forestry conditions in Wisconsin; E. M. Griffith. 1907. 15 p. Illus. From Annual report, Wisconsin state horticultural society, Madison, Wis., vol. 37.

Indiana—State board of forestry. 6th annual report. 1906. 194 p. Illus.

Manuals of Forestry—

Manual of forestry; W. Schlich. Vol. 1, ed. 3, 1906. 246 p. Illus. Vol. 3, ed. 3, 1905. 405 p. Illus. Bradbury, Agnew & Co., London.

Forest Botany—

The leguminosæ of Porto Rico; J. Perkins. 1907. 88 p. Contributions from the U. S. national herbarium, vol. 10, pt. 4.

Mikrographie des Holzes der auf Java vorkommenden Baumarten (The minute anatomical structure of the wood of the tree species of Java); H. H. Janssonius. 1906. 368 p. Illus. E. J. Brill, Leiden.

The trees of Great Britain and Ireland; H. J. Elwes and A. Henry. Vol. 1, 1906. 200 p. Illus. Privately printed, Edinburgh.

Forest Geography—

Maryland—Geological survey. Report on Calvert County, Md., containing a chapter on its forests, by H. M. Curran. 1907. 227 p. Illus. Johns Hopkins press, Baltimore, Md.

Maryland—Geological survey. Report on St. Marys County, Md., containing a chapter on its forests, by C. D. Mell. 1907. 209 p. Illus. Johns Hopkins press, Baltimore, Md.

Silvics—

Coppice-with-standards and larchwoods; W. R. Fisher. 1907. 16 p. Land agents' record, London.

The longleaf pine in virgin forest: a silvical study; G. F. Schwarz. 1907. 135 p. Illus. J. Wiley & Sons, New York.

*Die Waldvegetation präalpinen bayrischer Moore (The forest vegetation of pre-alpine Bavarian moors); Leiningen. W. Frick, Wien.

Educational—

- Classified list of publications available for distribution May 15, 1907; Forest Service. 1907. 4 p.
- Suggestive program for observance of Washington's birthday, Maryland day, and arbor and bird day. 1907. 44 p. Department of education, Annapolis, Md.

Forest Management**Working Plans—**

- The control of forest fires in McCloud, Cal.; A. W. Cooper and P. D. Kelleter. 1907. 16 p. Circular 79 of Forest Service.

Planting—

- Germination of pine seed; Forest Service. 1907. 12 p.
- Russian mulberry (*Morus albatatarica*); Forest Service. 1907. 3 p. Circular 83.
- White ash (*Fraxinus americana*); Forest Service. 1907. 4 p. Circular 84.
- Slippery elm (*Ulmus pubescens*); Forest Service. 1907. 4 p. Circular 85.
- Black cherry (*Prunus serotina*); Forest Service. 1907. 3 p. Circular 94.
- Sugar maple (*Acer saccharum*); Forest Service. 1907. 4 p. Circular 95.
- Forest nurseries and nursery methods in Europe; W. F. Fox. 35 p. Illus. From 8th-9th reports of the forest, fish, and game commission, Albany, N. Y.
- Treatment of cooperative forestry plots. 1907. 4 p. Illus. Circular 68 of Ohio agricultural experiment station, Wooster, Ohio.
- Uncle Sam's tree gardens; R. Bache. 1907. 1 p. In Saturday evening post, Phila., June 8, 1907.

Organization and Administration—

- Field program for June, 1907; Forest Service. 47 p.
- India—Forest department. Progress report of the forest surveys in India for 1905-6. 1907. 19 p. Calcutta.
- India—Ajmer-Merwara—Forest department. Annual report on forest administration for 1905-6. 1906. 39 p. Ajmer.
- India—United Provinces—Forest department. Annual progress report of forest administration in the eastern and western circle, 1905-6. 1906. 141 p. Allahabad.

National and State Forests—

- The use of the National Forests; Forest Service. 1907. 42 p. Illus.

Utilization—

- *Mine timbering; W. E. Sanders, B. McDonald, and N. W. Parlee. 1907. Illus. Hill Pub. Co., N. Y. \$2.

Timber Testing—

- An automatic measuring instrument for use in testing laboratories; L. E. Hunt. 1907. 4 p. Illus. In California journal of technology, Berkeley, Cal., April, 1907.
- A laboratory course in testing materials of construction; W. K. Hatt. 1905. 27 p. From Proceedings of Society for the promotion of engineering education, v. 13.
- Tests of materials of construction: timber; G. Lanza. 1904. 16 p.

Statistics—

- Lumber statistics for 1903; statistical summary of the American lumberman's 34th annual statistics. 1907. 64 p. The American lumberman, Chicago

Forest Enemies—**Insects—**

- The cottony maple scale in Illinois; S. A. Forbes. 1907. 18 p. Illus. Bulletin 112 of Illinois agricultural experiment station, Urbana, Ill.
- The elm leaf beetle; W. E. Britton. 1907. 14 p. Illus. Bulletin 155 of Connecticut agricultural experiment station, New Haven, Conn.
- The large larch sawfly. 1907. 8 p. Illus. Leaflet no. 186 of Board of agriculture and fisheries, London.

Arboretums—

- *L'arboretum de Tervueren; types de forêts des régions tempérées (The arboretum of Tervueren; types of the forests of temperate regions); C. Bommer. 1905. F. and L. Terneu, Bruxelles.
- Arboretum national des Barres; énumération des végétaux ligneux indigènes et exotiques qui y sont cultivés (The national arboretum at Barres; enumeration of the indigenous and exotic woody plants which are cultivated there); L. Pardé. 1906. 397 p. Illus. P. Klincksieck, Paris.

Irrigation—

United States—Reclamation Service. 5th annual report, 1906. 312 p. Illus.
Washington, D. C.

Forest Sanatoriums—

Pennsylvania forestry and camps for consumptives, by J. T. Rothrock. 1907.
Illus. In Chautauquan, Chautauqua, N. Y., June, 1907.

Periodicals—Articles of Special Interest—

The Woodworker, June, 1907.—Making veneered doors, p. 22; New process of
lumber drying, p. 28.

The Timber Trades Journal, April 13, 1907.—The biggest poplar tree in the
kingdom, p. 815.

American Lumberman, June 15, 1907.—How much standing timber is there in
British Columbia? p. 36; Pine products of the Atlantic coast, p. 51; Suc-
cess in southern flooring manufacture, p. 75; Canada's forest wealth,
p. 93; Vancouver's forest reserves, p. 93.

The New York Lumber Trade Journal, June 15, 1907.—Hardwood lumbering
in Georgia, p. 12.

Lumber Trade Journal (New Orleans), June 15, 1907.—Southern wood products,
p. 18.

The Lumber World, June 15, 1907.—Germans favor wood ties, p. 15.

American Lumberman, June 8, 1907.—Hardwood inspection rules committee's
report, p. 42A.

Southern Lumber Journal, June 1, 1907.—Our different supplies of timber,
p. 33.

Southern Lumberman, June 10, 1907.—The Yale forest school, by Henry S.
Graves, p. 63; Knowledge of standing timber, by Capt. J. B. White, p. 64.

Hardwood Record, June 10, 1907.—American forest trees—White cedar, p. 16;
Hardwood carpets, p. 17; Hardwood coffins in foreign lands, p. 48.

National Cooper's Journal, June, 1907.—Proper grading of cooperage stock, by
C. M. van Aken, p. 9; The Appalachian-White Mountain question, by
Thomas E. Will, p. 12; The supply of timber available for the manufac-
turers of slack cooperage stocks, by R. S. Kellogg, p. 13.

Canada Lumberman and Woodworker, June, 1907.—History of the British
Columbia cedar shingle, p. 13; Old and new ways of getting out lumber,
p. 14; Strength of timbers, by Professor Penhallows, McGill University,
p. 15; First methods of forestry, by H. R. McMillan, Yale forest school,
p. 16.

The Lumber Review, June, 1907.—Noncorroding woods in modern machinery,
p. 16.

Wood Craft, June, 1907.—Tie preservation, p. 90.

International Cooperage News, May 15, 1907.—Experiments with waste tur-
pentine wood, p. 12.

West Coast Lumberman, May, 1907.—Preventing forest fires, p. 587.

Hardwood Record, May 25, 1907.—American forest trees—Chinquapin oak, p.
16; Hickory wheels for motor trucks, p. 17; Modern hardwood and
cement combinations, p. 18; Firewood consumption in France, p. 19;
Peruvian hardwoods, p. 22.

Dixie Woodworker, May, 1907.—Lumber in Peru, p. 23; Lumber trade of Brazil,
p. 24.

The Southern Lumberman, May 25, 1907.—The Appalachian Mountains as a
hardwood supply, by Wm. L. Hall, p. 41; Woods work of forest students,
p. 41E.

Southern Industrial and Lumber Review, May 20, 1907.—Eucalyptus as rail-
road ties, p. 48; Historic American trees, p. 49; Central America's timber
lands, p. 64; Texas forest distribution, p. 64.

The Timber Trades Journal, May 18, 1907.—A reminiscence of the mahogany
trade in 1850, p. 1011.

American Lumberman, May 25, 1907.—Uses of osage orange wood, p. 36;
Impregnation of wood with tar oil, p. 44.

St. Louis Lumberman, May 15, 1907.—Canadian wood pulp supply, p. 27;
Railroad experiments in timber growing, p. 67; Yale forest students in
the Ozark Mountains, by R. C. Bryant, p. 78.

The Timberman, May, 1907.—Logging successfully with the overhead cable-
way system, p. 33; Timber cutting device, p. 70.

The Pacific Lumber Trade Journal, May, 1907.—Forest areas of nations, p. 24.

Barrel and Box, May, 1907.—Some problems of veneer making, p. 47; Hard-
wood ball manufacture, p. 48; Cultivating willows in the United States,
p. 49.

The Woodworker, May, 1907.—The care of lumber, p. 22; Practical drying, p. 27.

OFFICE OF EXTENSION.

Report on Seed Production—

The date for submitting the report on seed production is August 1, and supervisors should have the technical men and other officers on their Forest consider this matter carefully and report promptly, since the reports are used as a basis for planning seed collecting.

Progress of Germination Tests of Forest-Tree Seeds—

The practical soil tests to determine the germination per cent of the forest-tree seeds used in planting this spring have been completed, with the exception of a few flats containing seeds of the following species: *Pinus lambertiana*, *P. attenuata*, *P. coulteri*, *P. sabiniana*, *P. torreyana*, *P. muricata*, *Librocedrus decurrens*, and *Pseudotsuga taxifolia*.

The data obtained is now being tabulated and the conclusions drawn from the experiments will be embodied in a report which will be sent to the Forest officers directly concerned, or to others who may request it.

Replies to Circular Letter (SE) of May 7—

Less than half of the recipients of the above letter have made reply. Forest officers who are not able to furnish the desired information should so notify the Forester as soon as possible.

BRANCH OF PRODUCTS.

OFFICE OF WOOD UTILIZATION.

Map Notes—

An arrangement has been made with the Interior Department by which the U. S. Geological Survey will, upon request, print small editions of the General Land Office wall map of the United States for the use of the Forest Service. The map will show the National Forests to date of each edition, the Indian reservations, the public-land surveys, and the topographic and cultural features. The other features will be omitted, as they are unnecessary in the work of the Service and their omission gives a more legible and economical map.

The temporary force of colorists employed in copying the forest classification maps on file in Washington, D. C., for use in the files of the district inspectors will finish the work of duplication by July, 1907. The best maps available at present have been used, some of which will be replaced later when better data are obtainable.

Statistics of Forest Products—

The Bureau of the Census has recently issued a preliminary statement of the lumber cut of the United States in 1906, the data for which were gathered in cooperation with the Forest Service. The figures are the largest ever secured upon this subject, and show clearly the heavy drain annually made upon our forests. The cut in 1906 and that in 1899, with the percentage of change since 1899, are given below—Southern and western yellow pine are included under the head of yellow pine, and Norway pine with white pine.

The most striking fact shown by the table is that white pine, which for years occupied first place and was then succeeded by yellow pine, has now fallen to third, having been displaced by the rapidly increasing cut of Douglas fir.

	1906.	1899.	In-crease.		1906.	1899.	In-crease.
	<i>Million ft. B. M.</i>	<i>Million ft. B. M.</i>	<i>Per cent.</i>		<i>Million ft. B. M.</i>	<i>Million ft. B. M.</i>	<i>Per cent.</i>
Yellow pine.....	13,050	10,603	23.1	Birch.....	345	133	159.4
Douglas fir.....	4,970	1,737	186.1	Larch.....	290	51	468.6
White pine.....	4,593	7,483	-38.6	Cottonwood.....	264	415	-36.4
Hemlock.....	3,509	3,421	2.6	Beech.....	261
Oak.....	2,816	4,438	-36.5	Elm.....	212	457	-53.6
Spruce.....	1,650	1,448	14.0	Ash.....	208	269	-22.7
Maple.....	867	633	37.0	Hickory.....	149	97	53.6
Cypress.....	844	496	70.2	Sugar pine.....	139	54	157.4
Yellow poplar.....	683	1,115	-38.7	White fir.....	104
Redwood.....	660	360	83.3	Tupelo.....	52
Red gum.....	454	285	59.3	Walnut.....	48	39	23.1
Chestnut.....	397	207	91.8	All others.....	192	498	61.4
Basswood.....	373	308	21.1				
Cedar.....	360	233	54.5	Total.....	37,490	34,780	7.8

Computing—

The section of Computing has made considerable progress in the compilation of forest tables for species found in the National Forests. These tables include volume tables in diameter and height classes for different regions. Lodgepole pine and western yellow pine tables have been completed and submitted for publication. A large number of stem analyses are still necessary to complete the volume tables for other species. Some data are being gathered in the course of regular work in some of the National Forests, but information obtained is often incomplete. For example, measurements on over 800 trees of Engelmann spruce were recently sent in giving stump and breastheight diameters and log dimensions, but not the total height of the trees. As a result, a volume table is impossible, since for this both diameter and height must be known. A very little more trouble would have secured total height measurements and made the data much more valuable.

Mr. E. A. Zeigler, in charge of the section of Computing, will visit some of the National Forests during the summer for the purpose of securing additional analyses and getting in touch with Forest officers who may desire to gather measurements for tables for their Forests.

Stem analysis, height, and valuation survey blanks may be had on requisition and should be used whenever possible for the recording of measurements.

BRANCH OF OPERATION.

OFFICE OF ACCOUNTS.

Explanation in detail must be made for deductions in salaries of members or others reported on Form 143.

When Form 2a subvouchers have not been submitted in time to be included on Form 143 (which is forwarded monthly to this Office for payment of salaries), Form 3 salary voucher must be used in stating salary for such members.

OFFICE OF ORGANIZATION.

Fuel Supply—

The attention of supervisors is called to the following copies of letters from the President to the Secretary of Agriculture and from the Secretary of Agriculture to the Forester. Supervisors are hereby instructed to take action in accordance with these letters.

DEPARTMENT OF AGRICULTURE,
OFFICE OF THE SECRETARY,
Washington, June 13, 1907.

The FORESTER, *Forest Service.*

DEAR SIR: Please note the attached copy of a letter from the President of the United States in regard to fuel supplies for Government offices in the Northwest. You will please take such action as may be necessary to carry out the President's direction, so far as your Bureau is concerned.

Respectfully,

JAMES WILSON, *Secretary.*

[Inclosure.]

THE WHITE HOUSE,
Washington, June 11, 1907.

To the SECRETARY OF AGRICULTURE:

The Interstate Commerce Commission urges, upon the recommendation of the president of the Northern Pacific Railway Company, that the Federal Government should set a good example by laying in an adequate fuel supply for all its offices or branches in the Northwest well in advance of the next winter, so as to avoid so far as possible the trouble caused by the shortage of fuel in that region in the winter that has just passed. This is excellent advice. You are directed to have a complete stock of fuel at all offices controlled by your Department throughout the West prior to the 1st of October next, so that after that date it shall be unnecessary to buy any coal or wood for Indian schools, army posts, or any other Government uses throughout the Northwest.

THEODORE ROOSEVELT.

Ranger Examinations—

The Civil Service Commission will hold an examination for the position of forest ranger at each supervisor's headquarters on July 23 and 24. Supervisors should give this examination as much publicity as possible and encourage desirable persons to take it. The field part of the examination will be modified so that the examination may be held at or near each headquarters.

No deduction should be made from the salaries of forest guards on account of time spent by them in taking civil-service examination for the position of forest ranger.

Allotments and Transfers—

At the beginning of the fiscal year a definite amount of money will be allotted each Forest for salaries and general expenses. In the case of salaries, this allotment will carry with it a given number of men for a given period. In order that confusion may not result in keeping track of the expenditure of this allotment, Forest officers assigned to a given National Forest should be charged against that Forest unless transferred to another forest for a considerable length of time. If supervisors having charge of several Forests find it advisable to transfer men from one Forest to another for short periods, they may do so, but the men should be charged against the Forest to which they are permanently assigned. If it is found advisable to transfer an officer to another Forest permanently or for a considerable length of time the transfer should be requested, and in this case the allotment will be transferred with the man.

Temporary Transfers of Rangers—

Supervisors are cautioned to make provision for the return to their Forests of rangers temporarily transferred to Boundaries for work under the Act of June 11. They should learn from the Chief Inspectors the approximate length of time the services of these men will be needed for agricultural examinations. In recommending the appointment of guards or rangers to take the place of men so transferred, arrangements should be made so that on the completion of the agricultural work these men may be re-transferred from Boundaries to their Forests without the allotment being exceeded for which provision has already been made.

Rangers' Subsistence—

After careful consideration it has been decided that rangers who are called to the supervisor's headquarters for any other purpose than to attend rangers' meetings must furnish their own subsistence. Supervisors should make careful note of this decision and see that it works no unnecessary hardship for the rangers. When it is not practicable for rangers to use their own horses, expenses for travel may be allowed, but accounts for subsistence should not be submitted.

Identifying Expenses on Form 99—

In checking over the accounts of Forest officers it is often difficult to tell which items are charged under a given heading on Form 99. If in making these charges on Form 4, Forest officers would place the number of the heading on Form 99 against which it is charged after the amount of the item on Form 4, it would greatly assist in checking over accounts. To avoid confusing such a number with the amount of the entry, a circle may be drawn around the number.

When submitting accounts in behalf of rangers or guards for travel and subsistence, supervisors should in every case accompany the account with a brief statement of the character of the work in connection with which these expenses were incurred and the necessity for its performance. This matter should receive careful attention, since items not thus explained will be suspended pending further information from the supervisor.

Marking-Tools—

As a result of the request in the May Program for the experiences of men in the use of the marking ax, the Forester has received many valuable letters, written by rangers who have had experience in the use of both the ax and the hatchet. Following is an extract from one of these letters written by Forest Ranger C. B. Swim, of the Yellowstone National Forest (Shoshone Division), Wyoming:

I find that to mark timber to the best advantage in mixed stands both the marking hatchet and the marking ax should be at the worker's command. In marking lodgepole pine, balsam, or spruce the marking hatchet is much handier and time can be saved by using it; but in marking Douglas fir when the trees are large and have thick bark the light hatchet is almost useless and the marking ax much more effective, and much time and labor can be saved by its use. I recommend the use of both instruments.

Very respectfully,

CLARENCE B. SWIM.

The experience and criticisms of men who use these and other tools are very much desired in order that the needs of each Forest may be met. Rangers who have used the marking ax, the marking hatchet (with long or short handle), or the marking hammer are requested to write brief letters to their supervisors, stating their experiences and making such recommendations as they have to offer.

Supervisors are urged to encourage their men at all times freely to criticise all instruments that they use.

OFFICE OF ENGINEERING.

Increased Allotments for Improvement Work—

From letters which have been received from certain supervisors it appears that the manner of expending increases in their letters of authorization from the special improvement fund is not thoroughly understood.

Although not embodied in a special letter of authorization, any increase from the special fund is made for a specific purpose and must be used for this purpose only. Money allotted for one authorized improvement work should in no case be used for any other improvement until authority for such transfer is received from the Forester in reply to a recommendation by the supervisor.

Special-fund money should in no case be used for general expenses. The payment for special labor for work on permanent improvements is chargeable against the special fund, but such labor must be obtained with the understanding that as soon as the work on which the men are engaged is completed they will no longer be needed. Men hired under these circumstances should not be used for patrol duty or other Forest work, except in cases of sudden emergency, such as the need for fighting fire.

Telephone Lines—

Up to June 15 there have been 700 miles of single-wire telephone line construction authorized. About 1,200 additional miles will probably be authorized immediately after the first of the fiscal year.

It seems to be the general opinion among the supervisors that, under the instructions sent out for constructing telephone lines, it is never permissible to use poles shorter than 22 feet. This is erroneous, for when the necessity is shown a shorter pole may be used, provided that either the cost of the longer pole is excessive or the difficulty of securing it too great. Trees should be used wherever available in lieu of poles. This will materially lessen the cost of some of the lines on which estimates have been returned.

Colorado Telephone Company—

A contract has been signed by the Forest Service with the Colorado Telephone Company by which the company grants various concessions to the Service in consideration of the free right of way for their lines over the National Forests. The Forest Service will receive free use of the company's lines through the National Forests for official messages and special rates for the use of their lines between points situated beyond the boundaries of the Forests. The Service will also receive special rates for the purchase of instruments and line supplies.

The company will construct desirable lines in many cases in cooperation with the Service. The free use of timber is granted to the company for poles for the construction of lines on the National Forests, and pole timber will be sold in many cases to the company when needed for lines built outside the Forests.

The better connection will insure greater protection of the National Forests from fire and permit the rapid transaction of business with users of the Forests.

Form No. 221 has been originated for use under the terms of this contract for messages to be sent by the company, and the supervisors in the region served by the company's lines have been provided with a supply of these forms to be used by themselves and their forest rangers. The contract will go into effect on July 1.

Telephone Instruments on Forest-Service Lines—

As there seems to be some misapprehension among the supervisors in regard to the cooperative work with the settlers in constructing telephone lines and the privileges

which the Service can grant them, the following notes are given with the hope that they may tend to clear this matter up:

Where settlers cooperate in the construction of a Forest-Service line they expect the free use of the line, or the privilege of connecting an instrument with the Forest-Service line, in return for their work. Before it is promised that an instrument can be attached to the line the attention of settlers should be called particularly to the fact that the right to connect an instrument with the Forest-Service line, or the privilege of free use of the line, does not give them the right to use the exchange of any commercial company with which the Forest-Service line may connect, for the reason that Service contracts with the commercial companies are for official business of the Forest Service only, which does not include any person who may have connections with Service lines. Settlers will be required to make their own arrangements for such use of the exchange as they may desire. Under ordinary circumstances only those persons who cooperate in the construction of the telephone lines will be allowed to install an instrument on the Service line, and, unless this cooperation is of sufficient importance to warrant it, it would be better for the Service not to accept it, but to do the work alone and thus prevent overloading the line with instruments.

OFFICE OF LANDS.

Special Uses—

After July 1 the authority and responsibility in special-use business is practically transferred to the supervisors. (The Use Book, p. 44.) After that date the number of Forester's permits will be comparatively very small. A circular of instructions and suggestions, as a guide to the supervisors in special-use business, is in preparation. (The Use Book, p. 47.) This circular will contain a schedule of charges, various sample agreements, and other useful matter which could not well be published in The Use Book.

Forester's Copies of Supervisors' Permits—

It is very important that the supervisors, immediately upon approving each permit, send the original to the Forester, accompanied by a full report on Form 964. (The Use Book, p. 46.)

Special-Use Cards—

Form 619 has been revised and a new supply issued to the supervisors. Only the new cards should be used.

Stamps for Supervisors' Permits (*see The Use Book, p. 46*)—

A new stamp reading "Original for the Forester" has been sent to each supervisor, to be used for stamping the original of each supervisor's special-use permit. To avoid unnecessary new stamps the following stamps previously in use may be used for stamping the duplicate, supervisors' and rangers' copies, respectively: "Duplicate for permittee," "Forest Supervisor," and "Copy for information of field officer." Supervisors should make immediate requisition for any of these stamps not on hand.

Agreements Unapproved July 1—

Agreements prepared by the Forester before July 1, covering special uses for which the supervisors may now issue permits, should be approved by the supervisors and not returned to the Forester for approval.

Field Details—

Mr. C. H. Squire, of the section of Special Uses, has recently visited the headquarters of the San Gabriel, San Bernardino, San Jacinto, Santa Barbara, Monterey, Stony

Creek, Trinity, Shasta, Klamath, Siskiyou, and Stanislaus National Forests, to confer with and assist the supervisors in their special-use business.

Mr. C. S. Brothers, of the section of Special Uses, will, during July and August, visit the headquarters of the Pikes Peak, Leadville, Holy Cross, Battlement Mesa, Salt Lake, Wasatch, Uinta, Payson, Manti, Fruita, Ouray, Uncompahgre, and Gunnison National Forests for the same purpose.

Agricultural Settlement (*act of June 11, 1906*)—

The particular attention of the examiners is called to section 8 on Form 110. In every case complete information must be furnished under this section of any claims established or asserted and the date of alleged settlement given. These facts are absolutely essential before a withdrawal for the purpose of an administrative site is made.

Reports on lands applied for under the act of June 11, 1906, on Form 110, should set forth definite reasons for or against the listing of lands. The general statement that the lands are valuable for agriculture or for Forest purposes is not sufficient. If a part of a tract is recommended for listing the report should explain why it is desired and also give clear reasons why the other lands can not be listed.

Examiners on the agricultural settlement work when they believe lands should be withdrawn for administrative purposes should, while on the ground, make a complete examination and survey in accordance with both the instructions for agricultural settlement (Form 110) and the survey of administrative sites. Both of these reports will be presented to the supervisor for his approval and will be forwarded in the usual manner to the chief inspector for transmittal to the Forester. It should be noted that these instructions cancel the former order, which simply required that a recommendation for withdrawal only was necessary. If it is decided to recommend the tract for administrative purposes, and should an adverse claim exist or be asserted, supplemental reports, on new Form 654 for mineral entry and Form 655 for agricultural settlement, will be required.

Boundaries—Administrative Sites—

Supervisors in transmitting recommendations for the withdrawal of proposed administrative sites must bear in mind that no final action can be taken unless all adverse claims, if such exist, are fully reported upon. Mineral claims must be reported upon on new Form 654 and agricultural settlements on Form 655.

The attention of all Forest officers in charge of National Forests is called to the importance of complying with the instructions given in paragraphs 34 and 35 of part 4 of National Forest Order 23, which reads as follows:

34. All plats and descriptions hitherto received which could possibly be accepted as sufficiently definite have been accepted for withdrawal. Therefore all recommendations for ranger stations sent to the Washington office before April 15, 1907, for which no notification of withdrawal has been received by officers in charge prior to June 1, 1907, should be considered as rejected and be resubmitted as promptly as possible in accordance with this order.

35. In all cases in which the original descriptions were not sufficiently definite to enable the tract to be readily relocated, or in which more land than is needed has been either recommended or withdrawn, new descriptions should be submitted as soon as possible definitely locating the precise tracts needed.

The supervisors have in many cases made recommendations for the withdrawal of administrative sites which, owing to inaccuracy in the descriptions or for other reasons, it is afterwards found should not have been made. In such cases the supervisor should at once forward the necessary explanation to the Forester with a specific recommendation. Since the tract is noted as a possible administrative site, an applicant under the Act of June 11, 1906, would be informed that his application could not be considered. This is liable to result in serious injustice.

Each supervisor is requested to go over carefully all recommendations heretofore made and forward to the Forester a complete list of the tracts which will not be needed.

The utmost care should be exercised in preparing the lists, particularly in clearly identifying the tracts, with all descriptions which may have been previously given.

A report on a proposed administrative site must specifically state the character of the land—whether mineral or nonmineral. If mineral, the report should be supplemented by further report on new Form 654. If there is any reason to believe the title of the United States is clouded, the facts should be fully reported. Examiners under the act of June 11, 1906, should be particularly careful to fill out the section on claims in Form 110 before recommending the withdrawal of a tract for administrative purposes.

The use of the term "Ranger Station" as a general designation for all tracts withdrawn for the use of the Service is discontinued and the term "Administrative Site" is substituted for it. In all reference to such sites hereafter the following rule should be observed: When they are referred to as a general class, the term "Administrative Site" should be used. When, however, specific cases are referred to, they should be designated by a term indicating the nature of the sites, as, for instance, "Nursery Sites," "Ranger Sites," "Reservoir Sites," etc.

Claims—

In reports on mineral claims careful attention should be paid to that part of the report relative to the nature, extent, and value of the improvements, and the discovery of mineral.

Improvements must be such as directly tend to promote the extraction of mineral from the claims, such as cuts, shafts, tunnels, etc., hoisting machinery, blacksmith shops for sharpening tools, boarding and bunk houses for miners working the claims, and for placer claims hydraulic mining machinery, ditches or flumes for conveying water used in mining operations. Where extensive improvements are made on one or more claims for the benefit of others, the feasibility of developing claims on which improvements are not located should be clearly shown.

A common deficiency in filling out Form 655 and often in rendering special reports on settlement claims, where the settlement has not been continuous, is the failure to state the number, duration, and cause of absences, so as to enable the office to reach a proper conclusion where compliance with law has not been strict and the recommendation must accordingly be based, to a large extent, on apparent good or bad faith of claimant.

If it appears he has been absent from the land from time to time, the cause of the absence should be noted. If claimant is away to earn money to support himself and improve the claim, the nature of the employment should be stated, and whether claimant has continued to cultivate and improve the claim. Care should be taken if claimant has a family and they reside elsewhere, not on the claim, to indicate the character of that residence, whether claimant, in fact, maintains his home with the family, and not on the claim, notwithstanding appearances on the claim might otherwise indicate residence.

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U. S. Department of Agriculture

Issued August 1, 1907.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR AUGUST, 1907.

This program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service coöperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Principal Examiner.

HERBERT A. SMITH, Editor.

GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, Chief Inspector, Missoula, Mont.

P. G. REDINGTON, Inspector, Missoula, Mont.

F. A. SILCOX, Inspector, Thompson Falls, Mont.

GEO. H. CECIL, Inspector, Missoula, Mont.

C. H. ADAMS, Inspector, Missoula, Mont.

Inspection District 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, Kansas, Southeastern Montana, and Southeastern Utah.

SMITH RILEY, Chief Inspector, Denver, Colo.

R. P. IMES, Inspector, Denver, Colo.

T. D. WOODBURY, Inspector, Denver, Colo.

F. W. MORRELL, Inspector, Denver, Colo.

Inspection District 3.—Arizona, New Mexico, and Oklahoma.

D. D. BRONSON, Chief Inspector, Albuquerque, N. Mex.

T. S. WOOLSEY, Jr., Inspector, Albuquerque, N. Mex.

W. R. MATTOON, Inspector, Albuquerque, N. Mex.

A. O. WAHA, Inspector, Albuquerque, N. Mex.

Inspection District 4.—Utah, Southern Idaho, Western Wyoming, Eastern Nevada, and Northern Arizona.

R. E. BENEDICT, Chief Inspector, Salt Lake City, Utah.

F. W. REED, Inspector, Salt Lake City, Utah.

J. M. FETHEROLF, Inspector, Salt Lake City, Utah.

W. C. CLOS, Inspector, Salt Lake City, Utah.

Inspection District 5.—California and Western Nevada.

F. E. OLMSTED, Chief Inspector, San Francisco, Cal.

COERT DU BOIS, Inspector, San Francisco, Cal.

J. H. HATTON, Inspector, San Francisco, Cal.

WM. C. HODGE, Jr., Inspector, San Francisco, Cal.

G. W. PEAVY, Inspector, San Francisco, Cal.

S. J. FLINTHAM, Inspector, San Francisco, Cal.

J. K. CAMPBELL, Inspector, San Francisco, Cal.

Inspection District 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, Chief Inspector, Portland, Oreg.

M. L. ERICKSON, Inspector, Portland, Oreg.

W. H. B. KENT, Inspector, Portland, Oreg.

F. E. AMES, Inspector, Portland, Oreg.

WM. L. HALL, *Assistant Forester*, in the Office of the Forester; in charge White Mountain and Appalachian Investigation; Assistants, W. W. ASHE, ALFRED AKERMAN, and WALTER MULFORD.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman and Special Inspector*, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. COX, Assistant Forester, in Charge.

OFFICE OF MANAGEMENT.

E. E. CARTER, Chief (in the Field).

W. G. WEIGLE, Assistant Chief.

Timber Sales, **E. H. CLAPP** (in the Field).

G. M. HOMANS, Assistant.

I. F. ELDREDGE, Forest Assistant, Washington, D. C.

R. F. HAMMATT, Forest Assistant, Washington, D. C. (Detailed from Organization.)

P. T. HARRIS, Forest Assistant, Washington, D. C.

A. B. RECKNAGEL, Forest Assistant, Washington, D. C.

L. L. WHITE, Forest Assistant, Washington, D. C.

Temporary assignments for work on important sales under the direction of supervisors:

W. T. ANDREWS, Lumberman, Boise, Idaho.
 J. S. BAIRD, Lumberman, Cass Lake, Minn.
 G. P. BARD, Forest Assistant, Flagstaff, Ariz.
 M. BURNS, Lumberman, Cass Lake, Minn.
 J. ST. J. BENEDICT, Forest Assistant, Kalispell, Mont.
 GEO. L. COTT, Lumberman, Kalispell, Mont.
 W. G. DURBIN, Agent, Quincy, Cal.
 C. A. GALARNEAU, Forest Assistant, Sisson, Cal.
 GEORGE P. GREGG, Lumberman, Keystone, Wyo.
 E. M. HAMILTON, Lumberman, Deadwood, S. Dak.
 J. P. HUGHES, Lumberman, Orting, Wash.
 C. S. JUDD, Forest Assistant, Saratoga, Wyo.
 W. E. LA FOUNTAIN, Lumberman, Bishop, Cal.
 C. A. LEWIS, Forest Student, Boise, Idaho.
 D. T. MASON, Forest Assistant, Denver, Colo.
 W. R. MCKINNON, Lumberman, Cass Lake, Minn.
 H. G. MERRILL, Forest Assistant, Stauffer, Cal.
 S. L. MOORE, Forest Assistant, Kalispell, Mont.
 L. S. MURPHY, Forest Assistant Kalispell, Mont.
 H. C. NEEL, Forest Assistant, Deadwood, S. Dak.
 A. J. NORTON, Lumberman, Glenwood Springs, Colo.
 W. B. PIPER, Forest Assistant, Kalispell, Mont.
 R. G. POND, Forest Assistant, Sonora, Cal.
 F. X. SALZMAN, Lumberman, Big Horn, Wyo.
 G. E. SAWYER, Forest Student, Sumas, Wash.
 R. Y. STUART, Forest Assistant, Kalispell, Mont.
 FRANK TOMPKINS, Forest Agent, Kalispell, Mont.
 W. S. UHLER, Lumberman, Kalispell, Mont.
 J. D. WARNER, Forest Assistant, Boise, Idaho.
 K. W. WOODWARD, Forest Assistant, Kalispell, Mont.
 I. T. WORTHLEY, Forest Assistant, Delta, Colo.

Cooperation, J. S. HOLMES, Acting.

PROJECTS.

Kentucky—

Study of forest conditions in cooperation with the State—J. S. HOLMES and WESLEY BRADFELD, Pikeville.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Mexico—

Supervision of cutting, Fort Wingate Military Reservation, in cooperation with the War Department—J. G. PETERS, Guam, N. Mex.

Northeastern States—

Examination of woodlots and timber tracts—BENTON MACKAYE, 1524 Cambridge street, Cambridge, Mass.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant J. A. HOWARTH, Jr., Odanah.

Reconnaissance, S. J. RECORD.

New Mexico—

Mill scale study of western yellow pine—LOUIS MARGOLIN, Thornton; assistants, J. F. PEAVY and F. B. FORBES.

Examination of timberlands tributary to Cooney and Mogollon—W. D. STERRETT, Silver City.

Northwestern States—

Investigation of the supply of giant arborvitæ—S. J. RECORD, Kalispell, Mont.; assistants, J. REBMANN, Priest River, Idaho; N. B. ECKBO, Portland, Oreg.; J. F. PRESTON, Wenatchee, Wash.

Forest Atlas, F. G. PLUMMER.

Assignments for the instruction of rangers in surveying and mapping, under the direction of supervisors: D. C. HARRISON, Topographer, Kalispell, Mont.; C. C. BASSETT, Topographer, Delta, Colo.

OFFICE OF SILVICS.

RAPHAEL ZON, Chief.

Field Studies, RAPHAEL ZON.

PROJECTS.**Colorado—**

Location and estimate of timber infested by the Black Hills beetle, the Engelmann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins, in charge)—W. D. EDMONSTON, Larkspur, Colo.

Ecological studies of the Colorado forests, with special reference to their life history and their reproduction after cutting or burning—Prof. FREDERIC E. CLEMENTS, Lincoln, Nebr.

Eastern States—

Study of the hickories—A. T. BOISEN, Crawford, Tenn.

Montana—

Study of cut-over areas of lodgepole pine—E. R. HODSON, Helena, Mont.

Pennsylvania and Virginia—

Study of second-growth yellow poplar in northern Virginia and eastern Pennsylvania—W. W. ASHE, Washington, D. C.

Rocky Mountain States—

Study of Engelmann spruce, with special reference to its growth, volume, and reproduction—J. H. FOSTER, Delta, Colo.

Study of Douglas fir, with special reference to its growth, volume, and reproduction—E. H. FROTHINGHAM, Delta, Colo.

Library, M. V. CUNNINGHAM, Acting.

Compilation, E. H. FROTHINGHAM.

OFFICE OF EXTENSION.

SAMUEL N. SPRING, Chief (in the Field).

L. C. MILLER, Acting Chief.

Planting, F. J. PHILLIPS, Acting.

Assignments for work in nursery and planting under the direction of supervisors:

A. E. OMAN, Forest Assistant, Sheridan, Mont.

W. D. HAYES, Forest Assistant, Pocatello, Idaho.

Reconnaissance, W. H. VON BAYER.

PROJECTS.

Study of forest planting in irrigation projects in southern Idaho—E. O. SIECKE, Pocatello, Idaho.

Study of forest planting in irrigation projects in South Dakota, Montana, and Wyoming—F. G. MILLER, Billings, Mont.

Study of watersheds in the Wet Mountains National Forest—C. A. KUPFER, Westcliffe, Colo.

Study of forest planting in Mississippi—G. L. CLOTHIER, Agricultural College, Miss.

Preparation of plans for experimental planting on National Forests—W. H. VON BAYER, Walla Walla, Wash.

Cooperation, S. B. DETWILER.

PROJECTS.

Preparation of reports on forest planting in Ohio and Indiana—A. S. PECK, Washington, D. C.

California—

Experimental planting—G. B. LULL, Collaborator, Sacramento, Cal.

Hawaii—

Experimental planting—R. S. HOSMER, Collaborator, Honolulu.

BRANCH OF GRAZING.

A. F. POTTER, Assistant Forester, in Charge (in the Field).

L. F. KNEIPP, Inspector, Acting in Charge.

OFFICE OF CONTROL.

A. F. POTTER, Chief (in the Field).

L. F. KNEIPP, Acting Chief.

Allotment, L. F. KNEIPP.

Adjustment, JOHN D. LELAND.

Permits, Mrs. JENNIE B. BURNHAM, Acting.

OFFICE OF DEVELOPMENT.

A. F. POTTER, Chief (in the Field).

L. F. KNEIPP, Acting Chief.

Fences, C. H. ADAMS, Missoula, Mont.

Forage, W. C. CLOS, Salt Lake City, Utah.

Water, J. K. CAMPBELL, San Francisco, Cal.

BRANCH OF PRODUCTS.

R. S. KELLOGG, Acting in Charge.

OFFICE OF WOOD UTILIZATION.

R. S. KELLOGG, Chief.

Computing, E. A. ZIEGLER (in the Field).

Miss A. M. MEYNES, Acting.

Drafting, J. M. WITHEROW, Acting.

Wood Chemistry, H. S. BRISTOL.

Wood Uses, M. CLINE (in the Field).

H. S. BETTS, Acting.

PROJECTS.

California—

Tests of the strength of eucalyptus, redwood, and tanbark oak, in cooperation with the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Study of the uses of tanbark oak, in cooperation with the Northwestern Redwood Company—H. S. SACKETT, Berkeley.

Study of the utilization of National Forest woods—H. B. HOLROYD, Fresno.

Colorado—

Study of the utilization of National Forest woods—M. CLINE, Denver.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistant, CORNELIUS BARRY.

Leaching studies—D. C. PARMELEE, Yale Station, New Haven.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN, ROLF THELEN, and J. O. BIXBY.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—
J. B. KNAPP, Eugene; assistant, G. R. GESSERT.

Washington—

Tests of western hemlock and National Forest woods, in cooperation with the University of Washington—O. P. M. GOSS, University Station, Seattle.

Forest measurement investigations—E. A. ZIEGLER, Tacoma, Wash.

General Studies—

Washington office, timber tests—T. W. VENEMANN and H. E. MCKENZIE.

Collection of statistics of forest products, in cooperation with the Bureau of the Census—H. M. HALE and W. B. BARROWS, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of furniture woods—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation— ——— ———, Washington, D. C.

Study of chemical problems in wood utilization—ERNEST BATEMAN, Washington, D. C.; A. L. DEAN, 93 Broad street, Boston, Mass.

Studies in the heat conductivity of wood—FREDERICK DUNLAP, Washington, D. C.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief (in the Field).

W. F. SHERFESEE, Acting Chief.

PROJECTS.**Alabama—**

Preservative treatment of fence posts and other farm timbers, in cooperation with the State Department of Agriculture and Industries—C. L. HILL, Maplesville.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, 325 South Grand Avenue, Los Angeles; assistants, O. T. SWAN and W. H. KEMPFER.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Wisconsin—

The laying of an experimental track with hemlock and tamarack cross-ties to test the value of seasoning and treating, and of various devices for reducing the mechanical wear of the rails; in cooperation with the Chicago and Northwestern Railway Company—H. A. PAUL, New Ludington Hotel; Escanaba, Mich.

General Studies—

Study of preservative treatment of piling—C. S. SMITH, Washington, D. C.

Preparation of report on the experimental treatment of chestnut telephone poles—H. F. WEISS, Washington, D. C.

Correlation of data on the preservative treatment of American and foreign woods—M. C. JENSEN, Washington, D. C.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief (in the Field).

T. CLEVELAND, Jr., Acting Chief.

Articles, T. CLEVELAND, Jr.

Review, FINDLEY BURNS.

Printing, QUINCY R. CRAFT.

Distribution, BRISTOW ADAMS.

PUBLICATIONS IN JULY.

Production of Lumber, Lath, and Shingles, by States and Species, 1906, 1905, and 1904 (large sheet table).

Manual. Instructions for Examinations. Agricultural Settlement (Act of June 11, 1906).

Press Bulletin 152. The Question of Lumber Supply.

Press Bulletin 153. Trees Can Not be Acclimatized.

BRANCH OF OPERATION.

JAMES B. ADAMS, Assistant Forester, in Charge.

GEO. G. ANDERSON, Assistant in Office Methods.

OFFICE OF ACCOUNTS.

GEORGE E. KING, Fiscal Agent and Chief.

Disbursing, E. A. MELZAR.

Bookkeeping, O. H. TIBBOTT.

Appointments, Miss FLORENCE D. STRAUSE.

Receipts, Miss MARY R. LATIMER.

OFFICE OF MAINTENANCE.

HERMON C. METCALF, Chief.

Purchase, H. C. TOWERS.

Record, H. C. METCALF.

Supplies, A. M. SMITH.

Photography, A. G. VARELA.

OFFICE OF LANDS.

GEORGE F. POLLOCK, Chief.

Special Uses, M. J. McVEAN.

Claims, F. L. HARVEY.

Settlement, W. J. MANGAN.

Status, J. B. SATTERLEE.

Boundaries, A. C. RINGLAND.

H. O. STABLER, Washington, D. C.

District 1.

J. D. JONES, care E. A. Sherman, Missoula, Mont.

T. C. SPAULDING, care E. A. Sherman, Missoula, Mont.

District 2.

C. W. FITZGERALD, Deadwood, S. Dak.

B. C. HEILMAN, care Smith Riley, Empire Building, Denver, Colo.

P. D. KELLETER, Box 554, Deadwood, S. Dak.

S. S. LINSKOTTS, care Smith Riley, Empire Building, Denver, Colo.

R. G. LYON, care Smith Riley, Empire Building, Denver, Colo.

C. E. McMULLIN, care Smith Riley, Empire Building, Denver, Colo.

RESS PHILLIPS, care Smith Riley, Empire Building, Denver, Colo.

District 3.

A. J. ABBOTT, care D. D. Bronson, Albuquerque, N. Mex.

C. L. CASTLE, care R. C. McClure, Silver City, N. Mex.

J. W. FARMER, Roosevelt, Ariz.

STANTON G. SMITH, care D. D. Bronson, Albuquerque, N. Mex.

District 4.

R. V. R. REYNOLDS, Boise, Idaho.

G. C. THOMPSON, care R. E. Benedict, Salt Lake City, Utah.

District 5.

R. W. AYRES, South Pasadena, Cal.
 C. J. BUCK, Yreka, Cal.
 J. D. GUTHRIE, Quincy, Cal.

District 6.

L. A. HARRIS, care E. T. Allen, Portland, Oreg.
 L. WERNSTEDT, Wallowa, Oreg.

OFFICE OF ENGINEERING.

W. E. HERRING, Chief (in the Field).
A. T. MITCHELSON, Acting Chief.

J. H. CLARK, Sheridan, Mont. (Detailed to Organization).
 E. H. DARLING, Panguitch, Utah.
 GORDON EDSON, care Elers Koch, Missoula, Mont.
 E. E. LESLIE, care W. I. Pack, Provo, Utah.
 WILLIAM C. R. NESPITAL, Thirteenth and Sweezy streets, Marysville, Cal.

OFFICE OF ORGANIZATION.

CHAS. S. CHAPMAN, Chief (in the Field).
CLYDE LEAVITT, Acting Chief.

DWIGHT BUSHNELL, Forest Supervisor, District 1.
HARRY H. FRENCH, Forest Supervisor, District 2.
H. A. E. MARSHALL, Forest Supervisor, District 3.
H. F. STUDLEY, Forest Assistant, District 4.
R. L. P. BIGELOW, Forest Supervisor, District 5.
G. B. COLEMAN, Forest Supervisor, District 6.

NATIONAL FORESTS.

(Numerals following National Forests indicate Inspection Districts.)

ALASKA.

Alexander Archipelago—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)
Afognak—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)
Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)

ARIZONA.

Baboquivari—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)
Black Mesa (N.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)
Black Mesa (S.)—DRAYTON C. MARTIN, Acting Forest Supervisor, Clifton. (3)
Chiricahua—C. T. MCGLONE, Forest Supervisor, Paradise; H. D. BURRALL, Forest Assistant. (3)
Dragoon—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant.
Grand Canyon (N.)—SELDEN F. HARRIS, Forest Supervisor, Kanab, Utah; LORUM PRATT, Deputy Forest Supervisor. (4)
Grand Canyon (S.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)
Huachuca—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)
Mount Graham—THEO. T. SWIFT, Acting Forest Supervisor, Safford. (3)
Pinal Mountains—THEO. T. SWIFT, Acting Forest Supervisor, Safford. (3)
Prescott—F. C. W. POOLER, Forest Supervisor, Prescott. (3)
San Francisco Mountains—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, WILLARD M. DRAKE, R. F. BALTHIS, and L. L. JANES, Forest Assistants. (3)
Santa Catalina—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant. (3)

- Santa Rita**—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant. (3)
Tonto—W. H. REED, Forest Supervisor, Roosevelt. (3)
Tumacacori—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)

CALIFORNIA.

- Diamond Mountain**—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant. (5)
Inyo—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Klamath—W. B. RIDER, Acting Forest Supervisor, Yreka. (5)
Lassen Peak—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor; ALLAN R. POWERS, Forest Assistant. (5)
Modoc—C. E. RACHFORD, Acting Supervisor, Alturas. (5)
Monterey—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Pinnacles—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Plumas—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant. (5)
San Bernardino—R. H. CHARLTON, Forest Supervisor, Los Angeles. (5)
San Gabriel—R. H. CHARLTON, Forest Supervisor, Los Angeles; Pasadena Planting Station—E. C. CLIFFORD, Pasadena. (5)
San Jacinto—J. R. BELL, Forest Supervisor, Hemet. (5)
San Luis Obispo—E. S. MAINWARING, Forest Supervisor, San Luis Obispo. (5)
Santa Barbara—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara; San Marcos Planting Station—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara. (5)
Shasta—G. A. COLEMAN, Forest Supervisor, Sisson. (5)
Sierra (N.)—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS, JOHN MURDOCH, Jr., and N. F. MACDUFF, Forest Assistants. (5)
Sierra (S.)—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, F. B. KELLOGG, D. N. ROGERS, and C. M. GRANGER, Forest Assistants. (5)
Sierra (E.)—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Stanislaus—S. L. N. ELLIS, Forest Supervisor, Sonora. (5)
Stony Creek—ERNEST BRITTEN, Acting Forest Supervisor, Elk Creek. (5)
Tahoe—MADISON B. ELLIOTT, Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant. (5)
Trabuco Canyon—J. R. BELL, Forest Supervisor, Hemet. (5)
Trinity—F. H. HAFLEY, Forest Supervisor, Weaverville. (5)
Warner Mountains—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)

COLORADO.

- Battlement Mesa**—DAVID ANDERSON, Forest Supervisor, Collbran. (2)
Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache. (2)
Fruita—FRANK A. BLAIR, Acting Forest Supervisor. (2)
Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison; E. C. BERKY, Deputy Forest Supervisor. (2)
Holy Cross—JOHN McLAREN, Acting Forest Supervisor, Glenwood Springs; SWIFT BERRY, Forest Assistant. (2)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab, Utah. (2)
Las Animas—D. E. FITTON, Acting Forest Supervisor, La Veta. (2)
Leadville—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant. (2)
Medicine Bow (Colo. Div.)—HERBERT N. WHEELER, Forest Supervisor, Estes Park. (2)
Montezuma—ERNEST W. SHAW, Acting Forest Supervisor, Durango. (2)
Ouray—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
Park Range—THOMAS HOGAN, Forest Supervisor, Steamboat Springs. (2)
Pikes Peak—FRANK R. SHERWIN, Jr., Acting Forest Supervisor, Denver; W. J. MORRILL, Forest Assistant; Pikes Peak Planting Station—J. F. KÜMMEL, Forest Assistant, Colorado City. (2)
San Isabel—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
San Juan—F. C. SPENCER, Forest Supervisor, Monte Vista; A. A. PARKER, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant. (2)
Uncompahgre—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
Wet Mountains—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
White River—JAMES A. BLAIR, Forest Supervisor, Meeker. (2)

IDAHO.

- Bear River**—W. W. CLARK, Forest Supervisor, Logan, Utah; J. F. SQUIRES, Deputy Forest Supervisor. (4)
- Big Hole (S.)**—J. B. SEELY, Forest Supervisor, Sheridan, Mont. (1)
- Bitter Root**—F. A. FENN, Forest Supervisor, Kooskia. (1)
- Cabinet (N.)**—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
- Caribou**—J. T. WEDEMAYER, Forest Supervisor, Idaho Falls. (4)
- Cassia**—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
- Coeur d'Alene**—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; ROY HEADLEY, Deputy Forest Supervisor; DORR SKEELS, Forest Assistant. (1)
- Henry's Lake**—HOMER E. FENN, Forest Supervisor, St. Anthony; J. F. BRUNS and J. E. BARTON, Forest Assistants. (4)
- Kootenai**—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
- Lemhi (N.)**—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
- Lemhi (S.)**—GUY B. MAINS, Forest Supervisor, Mackay. (4)
- Palouse**—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; DORR SKEELS, Forest Assistant. (1)
- Payette**—EMILE GRANDJEAN, Forest Supervisor, Boise; C. E. DUNSTON and O. M. BUTLER, Forest Assistants. (4)
- Pocatello**—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
- Port Neuf**—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
- Priest River**—B. F. MCCONNELL, Forest Supervisor, Priest River; R. L. FROMME, Forest Assistant. (1)
- Raft River**—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
- Salmon River**—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
- Sawtooth**—EMILE GRANDJEAN, Forest Supervisor, Boise; C. E. DUNSTON and O. M. BUTLER, Forest Assistants. (4)
- Weiser**—JOHN B. LAFFERTY, Forest Supervisor, Weiser; WALTER M. CAMPBELL, Deputy Forest Supervisor; C. G. SMITH, Forest Assistant. (4)
- Yellowstone (Idaho Div.)**—HOMER E. FENN, Forest Supervisor, St. Anthony; J. F. BRUNS, J. E. BARTON, Forest Assistants. (4)

KANSAS.

- Garden City**—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr. (2)

MINNESOTA.

- Minnesota**—G. E. MARSHALL, Forest Supervisor, Cass Lake. (2)

MONTANA.

- Big Belt**—R. W. STUART, Forest Supervisor, Townsend. (1)
- Big Hole (Anaconda Div.)**—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
- Big Hole (N.)**—C. K. WYMAN, Acting Forest Supervisor, Dillon; ROBT. J. MOORE, Deputy Forest Supervisor. (1)
- Big Hole (S.)**—J. B. SEELY, Forest Supervisor, Sheridan.
- Bitter Root (Montana Div.)**—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
- Cabinet (N.)**—D. G. KINNEY, Forest Supervisor, Libby. (1)
- Cabinet (S.)**—F. A. SILCOX, Acting Forest Supervisor, Thompson Falls. (1)
- Crazy Mountains**—E. C. RUSSELL, Forest Supervisor, Livingston. (1)
- Ekalaka**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
- Elkhorn**—R. W. STUART, Forest Supervisor, Townsend. (1)
- Gallatin**—DAVID CONKLING, Forest Supervisor, Bozeman. (1)
- Helena**—E. W. SEARCY, Acting Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant. (1)
- Hell Gate (E.)**—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
- Hell Gate (W.)**—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
- Highwood Mountains**—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
- Kootenai**—D. G. KINNEY, Forest Supervisor, Libby. (1)
- Lewis and Clark (N.)**—F. N. HAINES, Forest Supervisor, Kalispell; W. M. H. DAUGS, Deputy Forest Supervisor. (1)

Lewis and Clark (S.)—PAGE S. BUNKER, Forest Supervisor, Kalispell. (1)
Little Belt—IRA E. TODD, Forest Supervisor, Neihart. (1)
Little Rockies—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
Lolo—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Long Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Madison—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Missoula—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Otter—A. C. MCCAIN, Acting Forest Supervisor, Miles City. (1)
Pryor Mountains—H. W. THURSTON, Acting Forest Supervisor, Cody, Wyo. (1)
Snowy Mountains—IRA E. TODD, Forest Supervisor, Neihart. (1)
Yellowstone (Absaroka Div.)—E. C. RUSSELL, Forest Supervisor, Livingston. (1)

NEBRASKA.

Dismal River—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. Halsey Planting Station—WILLIAM H. MAST; assistant, LA MOREE BESLEY, Halsey. (2)
Niobrara—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. (2)
North Platte—C. A. SCOTT, Forest Supervisor, Halsey. (2)

NEVADA.

Charleston—DAVID BARNETT, Acting Forest Supervisor, Las Vegas. (4)
Independence—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Monitor—MARK G. WOODRUFF, Forest Supervisor, Austin. (4)
Ruby Mountains—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Tahoe—M. B. ELLIOTT, Forest Supervisor, Nevada City, Cal. (5)
Toiyabe—MARK G. WOODRUFF, Forest Supervisor, Austin. (4)
Toquima—MARK G. WOODRUFF, Forest Supervisor, Austin. (4)

NEW MEXICO.

Big Burros—R. C. MCCLURE, Forest Supervisor, Silver City; DOUGLAS RODMAN, Forest Assistant. (3)
Gallinas—J. H. KINNEY, Acting Forest Supervisor, Capitan. (3)
Gila (N.)—JOHN KERR, Forest Supervisor, Magdalena. (3)
Gila (S.)—R. C. MCCLURE, Forest Supervisor, Silver City; W. H. GODDARD, Deputy Forest Supervisor; DOUGLAS RODMAN, Forest Assistant. Fort Bayard Planting Station—W. B. HADLEY, Forest Assistant, Fort Bayard. (3)
Guadalupe—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo. (3)
Jemez—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. (3)
Lincoln—J. H. KINNEY, Acting Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Fort Stanton. (3)
Magdalena—JOHN KERR, Forest Supervisor, Magdalena. (3)
Manzano—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Mount Taylor—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Pecos River—ROSS McMILLAN, Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. Las Gallinas Planting Station—S. Y. PARNAY, East Las Vegas. (3)
Peloncillo—C. T. MCGLONE, Forest Supervisor, Paradise, Ariz. (3)
Sacramento—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo. (3)
San Mateo—JOHN KERR, Forest Supervisor, Magdalena. (3)
Taos—ROSS McMILLAN, Forest Supervisor, Santa Fe. (3)

OKLAHOMA.

Wichita—W. R. MATTOON, Acting Forest Supervisor, Cache. (3)

OREGON.

Ashland—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Blue Mountains (E.)—HENRY IRELAND, Acting Forest Supervisor, Sumpter; H. D. FOSTER, Forest Assistant. (6)
Blue Mountains (W.)—A. S. IRELAND, Forest Supervisor, Prineville. (6)

Bull Run—R. B. WILSON, Forest Supervisor, Portland; A. E. CONOON, Forest Assistant. (6)
Cascade (N.)—R. B. WILSON, Forest Supervisor, Portland; A. E. CONOON, Forest Assistant. (6)
Cascade (S.)—S. C. BARTRUM, Forest Supervisor, Roseburg; CY. J. BINGHAM, Deputy Forest Supervisor. (6)
Coquille—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
Goose Lake—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
Heppner—THOMAS E. CHIDSEY, Acting Forest Supervisor, Heppner. (6)
Imnaha—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa. (6)
Siskiyou—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Tillamook—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Umpqua—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash. (6)

SOUTH DAKOTA.

Black Hills—J. F. SMITH, Forest Supervisor, Deadwood; H. J. BROWN, Forest Assistant. (2)
Cave Hills—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Short Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Slim Buttes—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)

UTAH.

Aquarius—GEORGE H. BARNEY, Forest Supervisor, Escalante. (4)
Bear River—W. W. CLARK, Forest Supervisor, Logan; J. F. SQUIRES, Deputy Supervisor. (4)
Beaver—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Dixie—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George. (4)
Fillmore—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Fish Lake—N. E. SNELL, Forest Supervisor, Salina. (4)
Glenwood—N. E. SNELL, Forest Supervisor, Salina. (4)
Grantsville—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Manti—A. W. JENSEN, Forest Supervisor, Ephraim. (4)
Monticello—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Payson—DAN S. PACK, Forest Supervisor, Payson. (4)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello, Idaho. (4)
Salt Lake—E. H. CLARKE, Forest Supervisor, Salt Lake City; Wasatch Planting Station—N. J. FETHEROLF. (4)
Sevier—TIMOTHY C. HOYT, Forest Supervisor, Panguitch. (4)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo; D. S. MARSHALL, Deputy Forest Supervisor; WM. M. ANDERSON, Deputy Forest Supervisor. (4)
Vernon—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
Wasatch—E. H. CLARKE, Forest Supervisor, Salt Lake City. (4)

WASHINGTON.

Colville—W. W. CRYDER, Acting Forest Supervisor, Republic. (6)
Olympic—FRED HANSON, Forest Supervisor, Hoodspoint. (6)
Priest River—B. F. MCCONNELL, Forest Supervisor, Priest River, Idaho. (1)
Rainier—G. F. ALLEN, Forest Supervisor, Orting; Chas. H. Flory, Forest Assistant. (6)
Washington (E.)—G. W. MILHAM, Forest Supervisor, Chelan. (6)
Washington (W.)—CHAS. W. ARMSTRONG, Acting Forest Supervisor, Sumas; B. P. Kirkland, Forest Assistant. (6)
Washington (Yakima Div.)—D. B. SELLER, Forest Supervisor, Wenatchee. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla. (6)

WYOMING.

Bear Lodge—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak. (2)
Big Horn—W. E. JACKSON, Forest Supervisor, Big Horn. (1)
Black Hills—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak. (2)
Caribou—J. T. WEDEMEYER, Forest Supervisor, Idaho Falls, Idaho. (4)
Crow Creek—J. W. NELSON, Forest Supervisor, Saratoga; J. E. Keach, Forest Assistant. (2)

Medicine Bow (Wyo. Div.)—J. W. NELSON, Forest Supervisor, Saratoga; J. E. Keach, R. A. Stretch, and John H. Bridges, Forest Assistants. (2)
Sierra Madre—J. W. NELSON, Forest Supervisor, Saratoga; J. E. Keach, R. A. Stretch, and John H. Bridges, Forest Assistants. (2)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo, Utah. (4)
Yellowstone (Shoshone Div.)—H. W. THURSTON, Acting Forest Supervisor, Cody; N. C. Whitney, Forest Assistant. (1)
Yellowstone (Teton Div.)—ROBT. E. MILLER, Forest Supervisor, Jackson. (4)
Yellowstone (Wind River Div.)—ZEPH JONES, Forest Supervisor, Pinedale. (4)

SERVICE CHANGES IN JULY, 1907.

APPOINTED.

Forester—

LAW—

Law Clerks: L. D. Everett and Guy M. Cowgill.

DENDROLOGY—

Artist: Mrs. Annie E. Hoyle.

Products—

WOOD UTILIZATION—

Collaborator: A. L. Dean.

Forest Assistants: Robert Rosenbluth and William B. Barrows.

Timber Testing Assistants: George R. Gessert and Cornelius Barry.

Clerk: Miss Maude Bell.

Silviculture—

MANAGEMENT—

Forest Assistants: David T. Mason, Louis S. Murphy, J. St. J. Benedict, Russell G. Pond, Philip P. Bard, C. S. Judd, and J. T. Preston.

Forest Agent: W. D. Clark.

Expert: Nils B. Eckbo.

Clerk: Miss E. S. De Valin.

Forest Students: C. A. Lewis, F. B. Forbes, and J. F. Peavy.

SILVICS—

Forest Assistants: Samuel T. Dana, John H. Foster, Carlos G. Bates, and K. R. MacGuffey.

Special Agent: F. E. Clements.

EXTENSION—

Forest Assistants: William D. Hayes, C. A. Kupfer.

Grazing—

DEVELOPMENT—

Forest Assistant: G. A. Pearson.

Scientific Assistant: Ivar Tidestrom.

Operation—

MAINTENANCE—

Clerks (S. and T.): Miss Claudine McClinton, Miss Eva L. Gay, Miss Jane Hanna, and Miss Pearl Schrader.

Laborers: S. G. Statesman and Irving Norris.

Messenger Boys: B. B. Irving and A. M. McCreight.

ACCOUNTS—

Clerks: Albert H. Cousins and S. Busch.

ENGINEERING—

Constructing Engineers: W. C. F. Nespital, A. T. Mitchelson.

LANDS—

Mining Claims Examiner: A. H. Hoppe.

ORGANIZATION—

The following were appointed Deputy Forest Supervisors:

District 2:

Gunnison—Edgar C. Berky.

San Juan—A. A. Parker.

The following were appointed Forest Assistants:

District 1:

Hell Gate (E.)—P. S. Lovejoy.

Yellowstone (Shoshone Division)—C. N. Whitney.

District 2:

Holy Cross—Swift Berry.

Medicine Bow (Wyo.)—R. A. Stretch and John H. Bridges.

District 3:

San Francisco Mountains—R. F. Balthis and L. L. Janes.

District 4:

Sawtooth—O. M. Butler.

Sierra (S.)—F. B. Kellogg, D. N. Rogers, and C. M. Granger.

Sierra (N.)—John Murdoch, jr., and N. F. Macduff.

Not Assigned:

Lincoln Crowell and Elwood I. Terry.

The following were appointed Assistant Forest Rangers:

District 2:

Medicine Bow (Wyo. Div.)—Ben F. Goe.

District 3:

Grand Canyon (N.)—Wm. A. Carlow, jr.

Dragoon—Birtsal W. Jones.

District 4:

Uinta—Nate L. Edmunds.

The following were appointed Clerks:

District 1:

Big Belt—Miss Dora Slawson.

Coeur d'Alene—Miss Grace Wilson.

District 2:

Park Range—Miss Margaret J. Shields.

District 3:

Huachuca—C. M. Rathbun.

Jemez—B. M. Thomas.

San Mateo—Arthur W. Dubois.

District 5:

Klamath—Miss Dorothy F. Larison.

San Jacinto—Miss Virginia Merz.

Sierra (N.)—Adolph E. Windeler.

Stanislaus—Allen Calcote.

The following were appointed Forest Guards:

District 1:

Big Hole (N.)—William H. Utley.

Bitter Root (Idaho)—J. Wells, G. W. Trentery, C. A. Scott, G. N. Scott, G. E. Piety, W. A. Squires, E. E. Squires, Jesse Gross, J. Hewitt, B. S. Bullock, and Robert P. McLaughlin.

Cabinet (S.)—Granville J. Gordon, Roscoe G. Dingley, C. C. Chisholm, Lynn C. Hamill, J. D. Buckhause, and Chas. M. McCauley.

Coeur d'Alene—Henry F. Kottkey, George M. Kinney, Chris Tschannen, Knox McAnnally, Fred A. Wagner, William S. Crerer, Lee S. Fields, Claude Stanton, Werner Rohar, and William R. Rozier.

Crazy Mountains—Charles H. Hurst.

Gallatin—Charles M. Bailey and Ernest Wethern.

Helena—William S. Moore and Harvey S. Mills.

Hell Gate (E.)—Norton L. Almon and Fred Hughes.

Lewis and Clark (S.)—Richard Groom, George Thomas, James Smith, Henry Billings, Herman Lang, Edward F. Mantle, William Monahan, Clyde P. Fickes, Benjamin F. Hale, and Ivan R. Myers.

Little Rockies—Fred D. Roberts.

Lolo—Nels Amble and Elmer J. Breen.

Otter—Andrew L. Jackson and Thomas C. Scott.

Priest River (Idaho)—Fred R. Sim.

Snowy Mountains—John A. Hageman.

Yellowstone (Absaroka Div.)—Joseph H. Hickman.

Yellowstone (Shoshone Div.)—Frank O. Swanson, D. D. Snapp, and Shepard Hiscox.

District 2:

Black Hills—August W. F. Gundlach.

Cochetopa—Thomas C. Hatton.

Medicine Bow (Wyo. Div.)—Andrew J. Kennady, Willis E. Broadhurst, and Ernest B. Steadman.

District 2—Continued.

Montezuma—Wm. F. Lease, Ralph R. Shaw, and S. J. Sease.

Monticello—Edward Rogerson.

San Juan—George Newell, Clarence Hocker, and Mark L. Healy.

Uncompahgre—Morton S. Beckley, W. V. Champion, and John H. Pritchard.

Yellowstone (Teton Div.)—A. M. Austin.

District 3:

Baboquivari—John Deegan.

Gila (S.)—Walter G. Musick, Andrew J. Stockbridge, and Theodore Davis.

Guadalupe—Daniel E. Bass.

Jemez—C. L. Grand.

Sacramento—J. A. Simmons and James A. Schultz.

San Mateo—Lock Oscar Carmichael.

Tonto—Claude B. Berbridge.

Tumacacori—Arthur H. Noon.

District 4:

Dixie—J. M. Moody.

Henrys Lake—C. W. Pfof.

Raft River (Idaho)—George H. Severe.

Salmon River—James M. Ryan and Frederick C. Haman.

Salt Lake—Chris J. Johansen and George C. Thompson.

Sawtooth—Peter A. Dixon and Harry D. Buckmaster.

Toiyabe—Winfield Scott Curry and Albert M. Olsen.

District 5:

Diamond Mountain—Frederick Stanky.

Klamath—Phil Stevens.

Lassen Peak—W. H. Hall.

Plumas—F. B. Cayot and Joseph Oswald.

San Gabriel—F. L. Bindhammer.

San Jacinto—Carl J. Sweeters.

Shasta—W. C. Melone, Arthur Togers, W. S. Jones, E. J. Wilson, and A. Thorne, jr.

Sierra (N.)—A. Tyler.

Sierra (S.)—R. C. Cormick, W. H. Pollister, R. D. Scott, and Albert Lubken.

Stanislaus—F. A. Bullard.

Tahoe—R. Eugene Taylor and A. C. Cornell.

Trinity—James M. McCampbell and O. O. Hays.

Warner Mountains—L. L. Smith.

District 6:

Blue Mountains (E.)—Charley D. Smith.

Cascade (N.)—Fred J. Bird, John Dinsmoore, Elbert C. Owens, and William R. Cantrell.

Cascade (S.)—Hart M. Harkins.

Imnaha—Earl H. Sherod, W. A. Moore, Earl W. Dunn, and Joe Carper.

Rainier—Harry Woods.

Washington (W.)—George Bradner.

RESTORED TO ROLLS WITH PAY.**Products—****UTILIZATION—**

Draftsman: T. Carlisle Coleman.

Silviculture—**EXTENSION—**

Forest Assistant: F. G. Miller.

Operation—**ORGANIZATION—**

Forest Assistant: Philip T. Coolidge, San Juan. (2)

REINSTATED.**Operation—****ORGANIZATION—**

Assistant Forest Ranger: William W. Gray, Santa Barbara. (5)

TRANSFERRED.**Operation—****ORGANIZATION—**

Forest Supervisor: H. N. Wheeler from Montezuma to Medicine Bow. (2)
 Deputy Forest Supervisor: Roy Headley from Palouse to Coeur d'Alene. (1)
 Forest Assistants: S. J. Flintham from Organization to Inspection; J. E. Keach from Management to Organization (Medicine Bow). (2)
 Forest Rangers: Henry A. Bergh from Organization (Sawtooth) (4) to Branch of Grazing; E. W. Shaw from San Juan to Montezuma (2); Raymond Tyler from Sierra (N.) to Sierra (E.) (5).
 Deputy Forest Rangers: Ernest S. Edgerton from Yellowstone (Teton Div.) to Sawtooth (4); H. H. Peregoy from Sierra (N.) to Sierra (E.) (5); J. R. Smith from Washington (Yakima Div.) to Washington (W.) (6).
 Assistant Forest Rangers: Glenn H. Crow from Sierra (N.) to Sierra (E.) (5); A. E. Harris from Coeur d'Alene to Palouse (1).
 Forest Guards: H. Vernon Anderson from Ashland to Siskiyou (6); J. L. Brewer from Long Pine to Ekalaka (2); Chas. L. Castle from Organization (Gila) (4) to Lands (Boundaries); E. S. Devine from Ekalaka to Long Pine (2); Sam S. Linscott from Organization (Pikes Peak) (2) to Lands (Boundaries); Wallace H. Partridge from Sierra (N.) to Sierra (E.) (5); George C. Thompson from Organization (Salt Lake) (4) to Lands (Boundaries).

PROMOTED.

Forester: Gifford Pinchot.
 Associate Forester: Overton W. Price.
 Clerk: Harry L. Hill.

APPALACHIAN STUDIES—

Forest Assistant: W. W. Ashe.

LAW—

Experts: Charles R. Pierce and George S. Arnold.
 Clerks: Miss Clara Ruth, Miss Anne Holt Pegram, and Mrs. Zula F. Pence.

DENDROLOGY—

Forest Assistant: C. D. Mell.

INSPECTION—

Chief Inspectors: F. E. Olmsted, E. A. Sherman, Smith Riley, D. D. Bronson, R. E. Benedict, and E. T. Allen.
 Inspectors: G. H. Cecil, F. A. Silcox, P. G. Redington, R. P. Imes, T. D. Woodbury, T. S. Woolsey, jr., F. W. Reed, C. Du Bois, J. H. Hatton, W. C. Hodge, jr., M. L. Erickson, W. H. B. Kent, W. R. Mattoon, G. W. Peavy, and J. M. Fetherolf.

Products—

Clerk: Mrs. Grace M. Stoddart.

WOOD UTILIZATION—

Forest Assistants: H. S. Sackett, J. J. Levison, Frederick Dunlap, H. M. Hale, H. B. Holroyd, A. H. Pierson, and H. D. Tiemann.
 Engineers in Timber Tests: H. S. Betts, J. B. Knapp, R. Thelen, J. A. Newlin, O. P. M. Goss, and A. L. Heim.
 Forest Experts: H. S. Bristol, W. C. Geer, and Ernest Bateman.
 Chief, Section of Computing: E. A. Ziegler.
 Clerks: Miss E. B. Stabler, Miss L. J. Robinson, Miss S. A. Hadden, and Mrs. Stella W. Munce.

WOOD PRESERVATION—

Forest Assistants: W. F. Sherfese, John M. Nelson, jr., W. H. Kempfer, H. B. Eastman, C. J. Humphrey, H. F. Weiss, C. Stowell Smith, O. T. Swan, and C. L. Hill.
 Engineer in Timber Tests: W. R. Wheaton.
 Forest Agent: M. C. Jensen.

PUBLICATION—

Clerk: Q. R. Craft.

Silviculture—**MANAGEMENT—**

Forest Assistants: I. F. Eldredge, D. C. Galarneau, J. A. Howarth, jr., S. L. Moore, R. Y. Stuart, H. G. Merrill, P. T. Harris, J. S. Holmes, H. C. Neil, L. L. White, I. T. Worthley, J. D. Warner, W. J. Bradfield, W. B. Piper, B. Mackaye, J. G. Peters, W. D. Sterrett, L. Margolin, K. W. Woodward, F. E. Ames, and A. B. Recknagel.
 Forest Agent: W. G. Durbin.
 Clerks: Fred Lees and Miss Lulu Brower.

Silviculture—Continued.**SILVICS—**

Forest Assistants: E. R. Hodson, A. T. Boisen, and J. Rebmann.

EXTENSION—

Forest Assistants: E. Siecke, A. S. Peck, F. J. Phillips, and A. E. Oman.

Grazing—**CONTROL—**

Clerks: Mrs. J. B. Burnham, Miss Rosemary Rhode, Miss Lillie V. Imhoff, and Miss Anna P. Koschwitz.

DEVELOPMENT—

Inspectors: W. H. Clos, C. H. Adams, L. F. Kneipp, and J. T. Wedemeyer.

Operation—**ADMINISTRATION—**

Clerk: G. G. Anderson.

MAINTENANCE—

Clerks: H. C. Metcalf, A. Mark Smith, R. K. Helphenstine, jr., C. H. Rowden, R. R. Whittleton, Mrs. L. B. Rector, Miss S. F. Seaton, Miss K. Williams, Miss A. B. Davidson, Miss Mabel Arnold, Miss E. J. Bernhardt, Miss E. F. Keating, Miss L. G. Riddell, Miss M. S. Stillwell, Miss Nellie E. Emerson, Mrs. Lillian McGregor, Miss J. I. Walton, Miss C. Glase, Miss H. R. Patterson, Mrs. R. C. Pennybaker, and G. H. Williams.

Messengers: J. W. Stack and H. D. Brown.

ACCOUNTS—

Clerks: E. A. Melzar, O. H. Tibbott, W. H. Shir-Cliff, J. J. Duffy, W. R. Fuchs, H. I. Loving, Miss M. R. Latimer, Miss Mary T. Miller, Miss Jennie Taylor, Miss Anna Hawkins, Mrs. Bina Manderfeld, Mrs. Grace Leonard Bowne, Mrs. B. B. Blackley.

ORGANIZATION—

Clerks: Mrs. V. M. Bain, Miss M. M. Echtermann, and Miss Pattie Sanderlin.

Forest Assistants: J. F. Bruins, E. C. Clifford, P. T. Coolidge, C. F. Flory, R. L. Fromme, B. P. Kirkland, F. W. Morrell, A. D. Read, M. N. Stickney, H. F. Studley, W. W. White, C. E. Dunston, S. J. Flintham, W. B. Hadley, A. E. Cohoon, H. D. Foster, A. R. Powers, C. G. Smith, W. H. Mast, W. J. Morrill, A. O. Waha, D. Rodman, H. D. Burrall, M. B. Pratt, J. H. Allison, R. F. Hammatt, J. E. Keach, and Dorr Skeels.

To Forest Supervisor: R. B. Wilson, Cascade (N.) (6); J. T. Wedemeyer, Caribou (4); Clyde R. Seitz, Tillamook and Umpqua (6).

To Acting Forest Supervisor: Drayton C. Martin, Black Mesa (S.) (3).

To Deputy Forest Supervisor: Frank R. Sherwin, jr., Pikes Peak (2); Ernest W. Shaw, Montezuma (2); W. W. White, Bitter Root (Montana) (1); Cy. J. Bingham, Cascade Range (S.) (6); Walter M. Campbell, Weiser (4).

LANDS—

Forest Assistants: R. W. Ayres, J. D. Guthrie, P. D. Kelleter, C. W. Fitzgerald, H. O. Stabler, S. G. Smith, R. V. R. Reynolds, C. J. Buck, and L. Wernstedt.

Clerks: M. J. McVean, C. H. Squire, W. J. Mangan, T. M. Moorman, Mrs. M. F. Anderson, Miss Mabel Berry, Miss S. R. McFadden, Miss E. L. MacFate, Miss Hattie Stein, Mrs. C. F. Love, Albert Ruppel, and C. S. Brothers.

LEAVE WITHOUT PAY.**Products—****WOOD UTILIZATION—**

Forest Assistant: H. D. Tiemann.

WOOD PRESERVATION—

Forest Assistant: C. J. Humphrey.

Grazing—**CONTROL—**

Expert: John D. Leland.

Clerk: Miss Anna P. Koschwitz.

Operation—**MAINTENANCE—**

Clerk: Miss Ethel C. Chappel.

ACCOUNTS—

Clerk: Miss Mary T. Miller.

FURLOUGHED.**Operation—****ORGANIZATION—**

Forest Supervisor: H. K. Porter, Uncompahgre (2).

Deputy Forest Rangers: Andrew G. Stockwell, Big Horn (2); H. E. White, San Gabriel (5).

Assistant Forest Rangers: Ray D. Dewell, Lewis and Clark (S.) (1); Joseph D. Wallace, Cascade (N.) (6).

SUSPENDED.**Operation—****ORGANIZATION—**

Assistant Forest Ranger: Charles O. Willis, Shasta (5).

Clerk: Arthur N. Marr, Sierra (N.) (5).

RESIGNED.**Products—****WOOD UTILIZATION—**

Forest Assistants: J. J. Levison and Robert Rosenbluth.

Expert: W. C. Geer.

Operation—**MAINTENANCE—**

Clerks: Miss Nannie Warder, Miss May Lambert, and Miss Jane Hanna.

ORGANIZATION—

Forest Supervisors: Shep N. Husted, Medicine Bow, Colo. (2); E. F. Morrissey, Wichita (3).

Deputy Forest Rangers: B. B. Holland, Lewis and Clark (S.), Mont. (1); James Bennett, Montezuma, Colo. (2); James W. Melrose, San Juan, Colo. (2); Warren H. Rutledge, Medicine Bow, Colo. (2).

Assistant Forest Ranger: Ralph W. Gordon, Black Hills, S. Dak. (2).

Forest Guards: Chas. Barthold, Helena (1); Robt. Gillies, Big Hole (N.), Mont. (1); James Kennedy, Hell Gate (E.), Mont. (1); Perry R. Rogers, Kootenai, Mont. (1); A. J. Sanders, Cabinet (N.), Mont. (1); A. J. Cathey, Sacramento, N. Mex. (3); Frank P. Cole, Baboquivari, Ariz. (3); Jas. W. Fleming, Big Burros, N. Mex. (3); Milton A. Holcomb, Santa Rita, Ariz. (3); A. B. Zumwalt, Gallinas, N. Mex. (3); George A. Brown, Sawtooth, Idaho (4); F. A. Buol, Charleston, Nev. (4); Arthur E. Douglas, San Jacinto, Cal. (5); E. P. Ross, Rainier, Wash. (6); Aaron T. Shannon, Washington (E.) (6).

LANDS—

Clerks: Miss Alice Davies and Miss Gertrude Lyddane.

SEPARATED.**Operation—****ORGANIZATION—**

Deputy Forest Ranger: Joseph M. Melrose, Montezuma (2).

Assistant Forest Rangers: G. W. Broadhurst, Medicine Bow (Wyo.) (2); Hiram H. McNeil, Colville (6).

Forest Guards: C. M. Douglas, Manzano (3); J. S. Spencer, Manzano (3); William H. Brock, Fremont (6); R. W. Sweetland, Siskiyou (6); George Woolridge, Siskiyou (6).

DISMISSED.

Forest Guard: W. A. Briggs, Coeur d'Alene (1).

With deep regret announcement is made of the death by drowning, on July 14, of Mr. Roscoe G. Dingley, Forest Guard on the Cabinet National Forest (S.), Montana.

SERVICE NOTES FOR AUGUST.

OFFICE OF THE FORESTER.

State Land in National Forests—Plans for Settlement—

The Forester is in favor of the adoption of either of the following plans for the disposition of surveyed or unsurveyed State Lands in National Forests:

(a) The State will be given in exchange for all its lands within the National Forests a solid block of National Forest land approximately equal in area and value to the lands surrendered. Credit will be given for all school sections, whether surveyed or unsurveyed, and for all selections which have been made by the State within the National Forests and approved by the Secretary of the Interior. Lands for which indemnity selection has been made elsewhere are not to be considered State lands. The State will contract to hold and maintain in perpetuity the lands taken by it as a State Forest under the same general conditions as are prescribed by the act of June 4, 1897 (30 Stat., 34-36). The State may charge for the sale of timber or other products, for the use of lands, for the use of water, for rights of way, and for power sites. It will have absolute control of the exploitation of the mineral deposits. The rights of settlers and claimants under the land laws of the United States at the time the exchange is made will be saved, and the right of the State and the Forest Service to contract for the management of the State Forest will be reserved.

(b) The State will accept in lieu of any rights which it may have in any lands within the National Forests a share in the earnings of all the National Forests in the State. This share will be proportionate to the area of such State lands (computed in the same manner as in plan a) as compared with the total area of the National Forests in the State exclusive of the area of lands within the National Forests held in private ownership. The State will expend this income for the purposes for which the respective grants of land were made by the United States, and as nearly as possible in proportion to the area of such lands so respectively granted. If at any time a National Forest including State lands ceases to exist, the State will resume its right in the land, and in such a case the proportionate income will be readjusted. So long as the Forest exists the State lands will in all respects be subject to the same laws, rules, and regulations as the lands of the United States within the Forests.

LAW.

Trespass—

The United States attorney for Colorado has been requested to bring injunction proceedings to restrain Fred Light from allowing his cattle to drift from the public domain upon the Holy Cross National Forest. The case will probably be carried up on an agreed statement of facts, so that a final decision may be reached as to whether State fence laws have any application to National Forests.

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Duplicate Letters of Transmittal—

The attention of all Forest officers is called to Regulation 24 on page 63 of "The Use Book" that the time, cutting area, total amount of timber, and price should in all Class A and B sales be entered upon the duplicate letter of transmittal. This is very necessary in order that the information of the Forester may be complete.

Marking Timber—

There have, of late, been several cases in which the area of a timber sale has included lake or river fronts, the brink of some canyon, or an important public highway. Wherever the forest has a distinct scenic value or is used as a public pleasure resort, it is desirable that Forest officers be careful to mark very lightly, aiming to improve the appearance of the Forest by removing only dead, dying, and defective trees and, in every way possible, to prevent unnecessary disfiguration. Along public highways no thrifty trees should be marked in a strip a hundred feet on each side of the road. Only the unsightly trees should be removed, and, so far as possible, effort should be made to secure a grove-like effect.

Application for Advance Cutting—

The form of application for the privilege of advance cutting as given below should be used in all cases where this privilege is requested, instead of the form on page 73 of "The Use Book." The instructions on page 73 are, however, still in force.

FORM OF APPLICATION FOR ADVANCE CUTTING.

----- Timber Sale.
 (Name of Applicant.)

----- National Forest.
 (Date.)

SIR:

-----, of -----,
 (I or we) (Place)
 -----, hereby apply for the privilege of advance cutting to the
 (State)
 amount of ----- under ----- timber-sale application
 (M. ft. B. M., cords, etc.) (My or our)
 of ----- National Forest, -----
 (Date) (State)

If this application is approved, ----- do hereby, in consideration of the granting
 (I or we)
 of said privilege, promise and agree to deposit with the Fiscal Agent of the Forest Service at Washington, D. C., in advance of cutting, a sum sufficient, in the judgment of the Forest officer in charge, to cover the estimated value of all such timber as may be cut under this application prior to notice of the award of the sale of the timber included in said timber-sale application; and to submit, in accordance with the directions in the notice of sale, based on said timber-sale application, a bid of not less than the minimum rate or rates named in said notice of sale, and further to pay said Fiscal Agent for all the timber cut as aforesaid, at not less than the minimum rate or rates named in said notice of sale, or, if a bid higher than the minimum rate or rates is received, at the rate or rates of said bid. And ----- further promise and
 (I or we)
 agree to cut and remove said timber in strict accordance with all and singular the rules, regulations, and provisions set forth in said application and such modifications thereof as may be made by the approving officer.

A deposit of ----- dollars (\$-----) has been sent to said Fiscal Agent to cover the estimated value of such timber as may be cut in advance as aforesaid.

Signed in duplicate this ----- day of -----, 1907.

-----, 1907.
 (City) (State) (Date)

 (Name of approving officer.)

 (Title of approving officer.)

OFFICE OF SILVICS.

New Forest Literature—Compiled by the Librarian.

The publications announced in this list consist of those on file in the Service library.

Forest Botany—

Hints on the collecting of timber specimens; H. Stone. 1907. 6 p. Illus. From Journal of economic biology, vol. 2, pt. 1.

Forest Management—

The improvement of our woodlands; L. S. Wood. 1906-7. 62 p. Transactions of Surveyor's institution, London, vol. 39, pts. 3 and 10.

Production of red cedar for pencil wood; L. L. White, 1907. 19 p. Circular 102 of the Forest service.

Planting—

Hardy trees, shrubs, and vines suitable for planting in Oklahoma; O. M. Morris. 1907. 6 p. Bulletin 73 of Oklahoma agricultural experiment station, Stillwater, Okla.

White oak (*Quercus alba*) (Forest planting leaflet); Forest service. 1907. 4 p. Circular 106.

Windbreaks and shelterbelts for the plains; B. O. Longyear. 1907. 2 p. Press bulletin 35 of Colorado agricultural experiment station, Fort Collins, Colo.

Organization and Administration—

Canada—Dept. of the Interior—Forestry branch. Report of the Superintendent of forestry, 1906. 1907. 32 p. Illus. Ottawa.

Field program for July, 1907; Forest service. 36 p.

India—Eastern Bengal and Assam—Forest dept. Progress report of forest administration for 1905-6. 1906. 65 p. Shillong, India.

National and State Forests—

Save the forests in the Appalachian and White Mts.; T. E. Will. 15 p. American forestry association, Washington, D. C.

Utilization—**Wood Preservation—**

The open-tank method for the treatment of timber; C. G. Crawford. 1907. 15 p. Circular 101 of the Forest service.

Statistics—

Census of manufactures, 1905—lumber and timber products; J. E. Wheelchel. 1907. 69 p. Illus. Bulletin 77 of the Bureau of the census.

Sawmill statistics; Forest service. 1907. 2 p. Circular 107.

Proceedings of Associations—

Royal Scottish arboricultural society. Transactions, vol. 20, pt. 2, July, 1907. Illus. Edinburgh.

Forest Enemies—**Insects—**

A note on the Duki fig-tree borer of Baluchistan (*Batocera rubus*); E. P. Stebbing. 1907. 7 p. Illus. Bulletin 10 of the Forest department, Calcutta, India.

The white-pine weevil; A. D. Hopkins. 1907. 8 p. Illus. Circular 90 of the Bureau of entomology, U. S. Dept. of agriculture.

Diseases of Trees—

Die Stockfäule der Fichte, ihre Entstehung und Verhütung (The stump rot of spruce, its cause and prevention); F. Boden. 1904. 91 p. Illus. H. Keese, Hameln.

Grazing—

Le pâturage dans les Alpes (Grazing in the Alps); E. Chabrand. 1906. 26 p. X. Drevet, Grenoble.

Irrigation—

Irrigation in the Yakima Valley, Washington; S. O. Jayne. 1907. 89 p. Illus. Bulletin 188. Office of experiment stations, U. S. Dept. of agriculture.

Zoology—

Grundriss der Zoologie für Forstleute (Principles of zoology for foresters); A. Jacobi. 1906. 263 p. Illus. H. Laupp, Tübingen.

Periodicals—Articles of Special Interest—

The St. Louis Lumberman, July 1, 1907.—Lumber production of the United States by woods, p. 67. Report of committee "Q" on standard specifications for the grading of structural timber, p. 81. An immense meeting at Denver discusses the public land policy—resolutions finally adopted; p. 82A.

Pacific Coast Wood and Iron, July, 1907.—Wood and metal tie, p. 9.

The Southern Lumber Journal, July 1, 1907.—More uses for tupelo gum, p. 45.

The West Virginia Lumberman and National Wholesaler, July 10, 1907.—The art of drying, p. 11; A tree tale—trees and their relations to freshets, p. 14; Profits in new forests, p. 15; Heat losses in the drying process, p. 19.

The Mississippi Valley Lumberman, July 5, 1907.—Storage battery locomotives in the lumber industry, p. 33.

American Lumberman, July 6, 1907.—Special by-products from the forests of the United States, p. 32; Southern pine product of 1906 compared with 1899, p. 37.

The Lumber Review, July, 1907.—Pennsylvania Railroad to plant 20,000 acres for ties, p. 12.

The Lumber World, July 1, 1907.—Hardwood lumber manufacturers of Wisconsin meet and adopt national hardwood rules, p. 16.

Periodicals—Articles of Special Interest—Continued.

- International Cooperage News, June 15, 1907.—Volume of air required for drying, p. 7.
 Wood Craft, July, 1907.—Heavy timbers and timbering, p. 106; The supply of wood, by H. von Schrenk, p. 108; Woods operations from stump to road, by J. J. Earle, p. 110; New process of kiln drying, p. 116.
 The New York Lumber Trade Journal, July 1, 1907.—Storage battery locomotives in the lumber industry, p. 30; Forestry plans of the Pennsylvania Railroad (as regards future tie supply), p. 46.
 American Lumberman, June 29, 1907.—Purchases of cross ties by steam and street railways in 1906, p. 28; Hemlock logging and tanbark peeling in Michigan and Wisconsin, p. 33.
 The Southern Lumberman, June 25, 1907.—Lumber cut during the year 1906, p. 38; Study of crude turpentine, p. 49.
 Dixie Wood-Worker, June, 1907.—Plant trees for future railroad ties, p. 13; Preservation of timber, p. 22.
 The Railway Age, June 28, 1907.—Fire-killed timber for railroad ties, p. 1211.
 West Coast Lumberman, June, 1907.—The demand for wood pulp, p. 662.
 Hardwood Record, June 25, 1907.—American forest trees—White willow, p. 16; New material for lead pencils, substituting potato starch for cedar.
 The Timberman, June, 1907.—Japanese lumber in Australia, p. 43; Modern timber-treating methods, p. 52.
 The West Virginia Lumberman and National Wholesaler, June 25, 1907.—Forestry, by Miss Florence N. Jack.
 Southern Industrial and Lumber Review ("Southwest"), June, 1907.—Uncommercial but useful trees of eastern Texas, p. 20; A northern wood famine, p. 21; Tupelo for coffin wood, p. 45; Red gum for cooperage, p. 45; Some Mexican woods, p. 56; Hunting mahogany, p. 61.
 American Lumberman, June 22, 1907.—Timber of Graham Island, British Columbia, p. 51.
 The American Telephone Journal, June 22, 1907.—Experiments with concrete poles, p. 414.
 Mississippi Valley Lumberman, June 21, 1907.—Increasing demand for concrete, p. 30.
 The Railway Engineering Review, June 22, 1907.—Reinforced concrete telegraph poles, Penna. lines, west, p. 541.
 Barrel and Box, June, 1907.—Waste in veneer, p. 46; Method of getting out ash-shovel handles, p. 48.

BRANCH OF OPERATION.

OFFICE OF ACCOUNTS.

Forms 98 and 99—

Many vouchers received for settlement are not accompanied by Forms 98 or 99. The cost-keeping system by projects and lines of work now in operation demands that every item disbursed be charged to a project or study, and it is absolutely essential, to make payment of the accounts without delay, that these forms be attached to pay rolls, and salary, expense, and purchase vouchers.

Signatures to Vouchers and Subvouchers—

To avoid the necessity of suspension, signature to vouchers and subvouchers must conform strictly to regulation 19, paragraph 5, of the Fiscal Regulations. The signature to a subvoucher from a corporation should consist of the corporate name of the company, and the proper autograph signature of one of its officers with the title of his office. When a voucher or subvoucher is signed by any person other than a member of the firm, or the proprietor, the title of such person should follow the signature.

Subvouchers for Transportation Charges—

Subvouchers for express and freight should show the initial and terminal points of shipment and the weight and rate. The original receipts or waybills should always be attached to the account.

Small Items to be Included in Monthly Account—

If supervisors and other officers when practicable will pay small accounts ranging from 50 cents to \$2, and submit them in their monthly expense vouchers, the number of accounts presented to this office for direct settlement will be materially lessened. This will assist in securing prompt payment of accounts.

Authorization Number and Date—

The number and date of the individual letter of authorization should not be entered on the face of the voucher (either Form 4 or Form A). This space is intended for the current letter of authorization of the Forester, and will be filled in by this office.

OFFICE OF ORGANIZATION.

Address in Telephone Directory—

In all towns where the Forest Service has an established office local officers should see that telephone addresses are standardized to "Forest Service." In many towns people are frequently unaware of the existence of a local office, and there is no way by which they can locate it, unless they know the name of the Supervisor. Where there are two telephone lines, the attempt should be made to get the same number on both. The following is a sample address:

Red 437 Forest Service,
Emile Grandjean, Forest Supervisor, Sawtooth and Payette National
Forests.

It is, of course, desirable that the telephone number be given also under the name of the Supervisor, where the latter appears in its alphabetical order.

Distribution of Publications—

Each officer in charge has been furnished with 100 copies of the 1907 edition of The Use Book and 300 copies of a new circular entitled "The Use of the National Forests." The distribution of the former should be limited to Forest officers and persons having business relations with the National Forests, while the circular is intended for general public distribution. It is desired that the circular be given as wide a distribution as possible among those not directly affected by the Forest administration. An additional supply of both books will be furnished when necessary.

Horses—When Required—

As the Use Book provides (p. 25), rangers are required to own and maintain the horses needed in their work. But whether these horses are required, is an administrative question, to be decided in each case by the Supervisor.

OFFICE OF LANDS.

Claims—

Many inquiries are being received from the General Land Office concerning claims in the National Forests upon which final proof has been made, of which the Forest Service has received no report from the Supervisor.

Forest officers should forward reports promptly upon any claim they have examined or of which they have received notice that final proof has been offered, so that they may be submitted to the General Land Office with appropriate recommendation.

Affidavits—

It is very important that Forest officers obtain affidavits from persons having knowledge of a claim, especially when adverse recommendations are made. (See p. 32, The Use Book.) They will greatly aid the Forest Service in sustaining these recommendations. If affidavits can not be secured, the reason should be clearly set forth. The place of residence of the affiants and the place where the affidavit was made should be given in the affidavits, and they should completely cover all the material facts concerning the claim.

Special Uses—

Suggestions are invited regarding the mimeographed circular upon special uses, issued to Forest officers on July 19. Supervisors are requested to criticize the circular and to recommend any changes which should be made in future editions.

Payments, Supervisors' Permits.—Particular attention is called to the instruction on page 46 of The Use Book, that when advance payments are required the permittees' copies of special-use agreements approved by the Supervisors must not be mailed to the permittees until the Supervisors receive the certificates of deposit from the Fiscal Agent. In many instances this instruction is disregarded.

Reports, Supervisors' Permits.—In many instances there is failure to comply with the instruction on page 46 of The Use Book requiring that the Forester's copies of Supervisors' special-use permits must always be accompanied by complete reports on Form 964. It is necessary to comply with that instruction in all cases.

SERVICE ORDERS.

SERVICE ORDER 1.

Official Orders.

JULY 1, 1907.

Hereafter, notice of changes in organization, new regulations for the government of the Service, and modifications of existing regulations, when of permanent character, will be issued in the form of Service Orders, in a numbered series. This series will include orders relating to the Service as a whole, as well as those formerly issued as National Forest Orders. Transient instructions to officers in charge of the National Forests will be issued in circular letters to the officers concerned.

Regulations dealing wholly with the administration of the Service in Washington will be issued as Office Orders, in a numbered series. Instructions of transient character in the Service at Washington will be issued in the form of memoranda to be initialed by the Chiefs of Branches and Offices. In every case a copy of the memorandum will be furnished to the Chief who initials.

All Service Orders will be published in the Field Program, and will not be mimeographed and sent out during the month except in cases of special urgency. Office Orders will be mimeographed and furnished to all Branches and Offices of the Service in Washington.

OVERTON W. PRICE,
Associate Forester.

SERVICE ORDER 2.

Cooperation with Stockmen in the Construction of National Forest Improvements.

JULY 22, 1907.

Whenever the stockmen who are using any National Forest range desire to construct drift, division, or boundary fences for the better handling of their stock or to prevent trespass, and when these fences would assist Forest officers in the administration of the Forest, all posts, rails, and logs needed for building them will be furnished from the National Forest free of charge.

Whenever circumstances justify it, all wire and staples needed for the construction of the fences will be furnished by the Forest Service and will be delivered free of charge at the nearest railroad station.

The stockmen will be required to enter into an agreement to dig the post holes; cut, haul, and set the posts; haul the wire from the railroad station, erect the fence and assist in keeping it in repair.

All boundary fences must be built in conformity with the State and Territorial fence laws, and all fences must have gates at points designated by the Forest officers.

No fence will be allowed which will interfere with an equitable division of the range among its users, or which will in any way be detrimental to the best interests of the Forest.

Whenever stock-watering reservoirs are needed on certain portions of a National Forest, in order that stock may graze there and utilize forage which otherwise would be wasted, the Forest Service will cooperate with the stockmen in building them or, when circumstances warrant it, will bear the entire expense of construction.

When an application is received by the Forest Supervisor for the construction of a fence or reservoir, he will have an examination made by a Forest officer. The Supervisor will include a detailed estimate of the cost of construction in his report to the Forester, and send a map showing the exact location of the proposed fence or reservoir. If construction is approved, the expenditure will be authorized by the Forester and a letter of instructions sent the Supervisor, who may then begin the work.

OVERTON W. PRICE,
Associate Forester.

Issued August 31, 1907.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR SEPTEMBER, 1907.

This program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Principal Examiner.

HERBERT A. SMITH, Editor.

GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, Chief Inspector, Missoula, Mont.

P. G. REDINGTON, Inspector, Missoula, Mont. ; F. A. SILCOX, Inspector, Thompson Falls, Mont. ; GEO. H. CECIL, Inspector, Missoula, Mont. ; C. H. ADAMS, Inspector, Missoula, Mont.

Inspection District 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, Kansas, Southeastern Montana, and Southeastern Utah.

SMITH RILEY, Chief Inspector, Denver, Colo.

R. P. IMES, Inspector, Denver, Colo. ; T. D. WOODBURY, Inspector, Denver, Colo. ; F. W. MORRELL, Inspector, Denver, Colo.

Inspection District 3.—Arizona, New Mexico, and Oklahoma.

D. D. BRONSON, Chief Inspector, Albuquerque, N. Mex.

T. S. WOOLSEY, Jr., Inspector, Albuquerque, N. Mex.; W. R. MATTOON, Inspector, Cache, Okla.; A. O. WAHA, Inspector, Albuquerque, N. Mex.; WILL C. BARNES, Inspector, Albuquerque, N. Mex.

Inspection District 4.—Utah, Southern Idaho, Western Wyoming, Eastern Nevada, and Northern Arizona.

R. E. BENEDICT, Chief Inspector, Salt Lake City, Utah.

F. W. REED, Inspector, Salt Lake City, Utah; J. M. FETHEROLF, Inspector, Salt Lake City, Utah.

Inspection District 5.—California and Western Nevada.

F. E. OLMSTED, Chief Inspector, San Francisco, Cal.

COERT DU BOIS, Inspector, San Francisco, Cal.; J. H. HATTON, Inspector, San Francisco, Cal.; WM. C. HODGE, Jr., Inspector, San Francisco, Cal.; G. W. PEAVY, Inspector, San Francisco, Cal.; S. J. FLINTHAM, Inspector, San Francisco, Cal.; J. K. CAMPBELL, Inspector, San Francisco, Cal.

Inspection District 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, Chief Inspector, Portland, Oreg.

M. L. ERICKSON, Inspector, Portland, Oreg.; W. H. B. KENT, Inspector, Portland, Oreg.; F. E. AMES, Inspector, Portland, Oreg.

WM. L. HALL *Assistant Forester*, in the Office of the Forester; in charge White Mountain and Appalachian Investigation; Assistants, A. K. CHITTENDEN, W. W. ASHE, ALFRED AKERMAN, and WALTER MULFORD.

THOMAS H. SHERRARD, *Assistant Forester and Special Inspector*, in the Office of the Forester.

E. S. BRUCE, *Expert Lumberman and Special Inspector*, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. COX, Assistant Forester, in Charge.

OFFICE OF MANAGEMENT.

E. E. CARTER, Chief (in the Field).

W. G. WEIGLE, Assistant Chief.

Timber Sales, E. H. CLAPP (in the Field).

G. M. HOMANS, Assistant.

Cooperation, J. S. HOLMES, Acting.

PROJECTS.

Kentucky—

Study of forest conditions in cooperation with the State—WESLEY BRADFELD, Pikeville.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Mexico—

Supervision of cutting, Fort Wingate Military Reservation, in cooperation with the War Department—J. G. PETERS, Guam, N. Mex.

Northeastern States—

Examination of woodlots and timber tracts—BENTON MACKAYE, 1524 Cambridge street, Cambridge, Mass.

Wisconsin—

Working plans for timber sales on Indian reservations in cooperation with the State—E. M. GRIFFITH, State Forester, Madison; assistant J. A. HOWARTH, Jr., Odanah.

Reconnaissance, S. J. RECORD.

Montana—

Preparation of a volume table for western larch—LOUIS MARGOLIN, Kalispell.

New Mexico—

Examination of timber lands tributary to Cooney and Mogollon—W. D. STERRETT, Silver City.

Northwestern States—

Investigation of the supply of giant arborvitæ—S. J. RECORD, Kalispell, Mont.; assistants J. REBMANN, Priest River, Idaho; N. B. ECKBO, Portland, Oreg.; J. F. PRESTON, Wenatchee, Wash.

Forest Atlas, F. G. PLUMMER.

Assignments for the instruction of rangers in surveying and mapping, under the direction of supervisors: D. C. HARRISON, *Topographer*, Kalispell, Mont.; C. C. BASSETT, *Topographer*, Delta, Colo.

OFFICE OF SILVICS.

RAPHAEL ZON, Chief.

Field Studies, RAPHAEL ZON.

PROJECTS.

Colorado—

Location and estimate of timber infested by the Black Hills beetle, the Engelmann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins, in charge)—W. D. EDMONSTON, Larkspur, Colo.

Ecological studies of the Colorado forests, with special reference to their life history and their reproduction after cutting or burning—Prof. FREDERIC E. CLEMENTS, Lincoln, Nebr.

Eastern States—

Study of the hickories—A. T. BOISEN, Hotel Gayoso, Memphis, Tenn.; assistant, C. G. BATES, General Delivery, St. Louis, Mo.

Montana—

Study of cut-over areas of lodgepole pine—E. R. HODSON, care C. C. HALL, Anaconda, Mont.

Northeastern States—

Study of the birches—S. T. DANA, Bangor, Me.

Rocky Mountain States—

Study of Engelmann spruce, with special reference to its growth, volume, and reproduction—J. H. FOSTER, care WM. R. KREUTZER, Gunnison, Colo.

Study of Douglas fir, with special reference to its growth, volume, and reproduction—E. H. FROTHINGHAM, Provo, Utah.

Library, H. E. STOCKBRIDGE.

Compilation, ———— ————.

OFFICE OF EXTENSION.

SAMUEL N. SPRING, Chief.

Planting, L. C. MILLER (in the Field).

Assignments for work in nursery and planting under the direction of supervisors:

A. E. OMAN, Forest Assistant, Sheridan, Mont.

W. D. HAYES, Forest Assistant, Pocatello, Idaho.

Reconnaissance, W. H. VON BAYER.

PROJECTS.

Colorado—

Study of watersheds in the Las Animas National Forest—C. A. KUPFER, La Veta.

Mississippi—

Educational work in Mississippi—G. L. CLOTHIER, Agricultural College, Miss.

Washington—

Preparation of plans for experimental planting in National Forests—W. H. VON BAYER, Walla Walla.

Cooperation, A. S. PECK, Acting, in charge.

Preparation and revision of plans for experimental planting at cooperative experiment stations—A. S. PECK, Washington, D. C.

Hawaii—

Experimental planting—R. S. HOSMER, Collaborator, Honolulu.

Idaho—

Preparation of report on forest planting in irrigation projects in southern Idaho—E. O. SIECKE, Pullman, Wash.

BRANCH OF GRAZING.

A. F. POTTER, Assistant Forester, in Charge (in the Field).

L. F. KNEIPP, Inspector, Acting in Charge.

OFFICE OF CONTROL.

A. F. POTTER, Chief (in the Field).

L. F. KNEIPP, Acting Chief.

Allotment, L. F. KNEIPP.

Adjustment, JOHN D. LELAND.

Permits, ANNA P. KOSCHWITZ.

OFFICE OF DEVELOPMENT.

A. F. POTTER, Chief (in the Field).

W. C. CLOS, Acting Chief.

Fences, C. H. ADAMS.

Forage, W. C. CLOS.

Water, J. K. CAMPBELL.

PROJECTS.

Oregon—

Forage investigations, Imnaha National Forest. F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Wallowa, Oreg.; JAMES F. JARDINE, Expert, Wallowa, Oreg.; ARTHUR T. SAMPSON, Expert, Wallowa, Oreg.; G. A. PEARSON, Forest Assistant, Wallowa, Oreg.

Colorado—

Poisonous plant investigations. Prof. C. D. MARSH, Expert, Bureau of Plant Industry, in charge, Hugo, Colo.; IVOR TIDESTROM, Hugo, Colo.

BRANCH OF PRODUCTS.

R. S. KELLOGG, Acting in Charge.

OFFICE OF WOOD UTILIZATION.

R. S. KELLOGG, Chief.

Computing, E. A. ZIEGLER (in the Field).	Drafting, C. A. KOLB.
Miss A. M. MEYNES, Acting.	Wood Chemistry, H. S. BRISTOL.
	Wood Uses, M. CLINE (in the Field).
	H. S. BETTS, Acting.

PROJECTS.

California—

Tests of the strength of eucalyptus, redwood, and tanbark oak, in cooperation with the University of California—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Study of the uses of tanbark oak, in cooperation with the Northwestern Redwood Company—H. S. SACKETT, Berkeley.

Study of the utilization of National Forest woods—M. CLINE, Berkeley.

Forest measurement investigations—E. A. ZIEGLER, Los Angeles.

Colorado.

Study of markets for forest products—H. M. HALE, Denver.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistant, CORNELIUS BARRY.

Leaching studies—D. C. PARMELEE, Yale Station, New Haven.

Florida—

Turpentine orcharding experiments—P. D. EDMUNDS, Walkill.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN, ROLF THELEN, and J. O. BIXBY.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene; assistant, G. R. GESSERT.

Study of the uses of National Forest woods—H. B. HOLROYD, Portland.

Washington—

Tests of western hemlock and National Forest woods, in cooperation with the University of Washington—O. P. M. Goss, University Station, Seattle.

General Studies—

Washington office, timber tests—T. W. VENEMANN, and H. E. MCKENZIE.

Collection of statistics of forest products, in cooperation with the Bureau of the Census—W. B. BARROWS, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of furniture woods—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation— ———, Washington, D. C.

Study of chemical problems in wood utilization—ERNEST BATEMAN, Washington, D. C.; A. L. DEAN, 93 Broad street, Boston, Mass.

Studies in the heat conductivity of wood—FREDERICK DUNLAP, Washington, D. C.

Studies of pulp woods—E. SUTERMEISTER, Washington, D. C.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief (in the Field).

W. F. SHERFESEE, Acting Chief.

PROJECTS.

Alabama—

Preservative treatment of fence posts and other farm timbers, in cooperation with the State Department of Agriculture and Industries—C. L. HILL, Maplesville.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistants, O. T. SWAN and W. H. KEMPFER.

Louisiana—

Experiments to devise a system for treating the products of southern lumber mills, in cooperation with the Great Southern Lumber Company—H. F. WEISS, Bogalusa.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—C. STOWELL SMITH, care Philadelphia and Reading Coal and Iron Company, Pottsville.

Texas—

Experiments in the treatment of loblolly pine cross-ties, in cooperation with the International and Great Northern Railroad Company—JOHN M. NELSON, Jr., permanent address, Washington, D. C.

Wisconsin—

The laying of an experimental track with hemlock and tamarack cross-ties to test the value of seasoning and treating, and of various devices for reducing the mechanical wear of the rails; in cooperation with the Chicago and Northwestern Railway Company—H. A. PAUL, New Ludington Hotel, Escanaba, Mich.

General Studies—

Correlation of data on the preservative treatment of American and foreign woods—M. C. JENSEN, Washington, D. C.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief.

Articles, T. CLEVELAND, Jr.

Review, FINDLEY BURNS.

Printing, QUINCY R. CRAFT.

Distribution, BRISTOW ADAMS.

PUBLICATIONS IN AUGUST.

Bulletin 70. Effects of Moisture upon the Strength and Stiffness of Wood.

Bulletin 71. Rules and Specifications for the Grading of Lumber Adopted by the Various Lumber Manufacturing Associations of the United States. The Use Book. (Reprint.)

Circular 108. The Strength of Wood as Influenced by Moisture.

National Forests and the Lumber Supply. (Reprint from Yearbook for 1906.)

Circular 110. Exports and Imports of Forest Products, 1906.

BRANCH OF OPERATION.

JAMES B. ADAMS, Assistant Forester, in Charge.

GEO. G. ANDERSON, Assistant in Office Methods.

OFFICE OF ACCOUNTS.

GEORGE E. KING, Fiscal Agent and Chief.

Disbursing, E. A. MELZAR.

Bookkeeping, O. H. TIBBOTT.

Appointments, Miss FLORENCE D. STRAUSE.

Receipts, Miss MARY R. LATIMER.

OFFICE OF MAINTENANCE.

HERMON C. METCALF, Chief.

Purchase, H. C. TOWERS.

Record, H. C. METCALF.

Supplies, A. M. SMITH.

Photography, A. G. VARELA.

OFFICE OF LANDS.

GEORGE F. POLLOCK, Chief (in the Field).
M. J. McVEAN, Acting Chief.

Special Uses, **M. J. McVEAN**.
 Claims, **F. L. HARVEY**.
 Settlement, **W. J. MANGAN**.
 Status, **J. B. SATTERLEE**.

Boundaries, **A. C. RINGLAND** (in the Field).
H. O. STABLER.

OFFICE OF ENGINEERING.

W. E. HERRING, Chief (in the Field).
A. T. MITCHELSON, Acting Chief.

J. H. CLARK, Sheridan, Mont. (detailed to Organization); **R. E. CLABBY**, assistant.
E. H. DARLING, care **R. E. BENEDICT**, Salt Lake, Utah.
GORDON EDSON, care **J. B. SEELEY**, Sheridan, Mont.
E. E. LESLIE, care **W. I. PACK**, Provo, Utah.
WILLIAM C. R. NESPITAL, Washington, D. C.

OFFICE OF ORGANIZATION.

CHAS. S. CHAPMAN, Chief (in the Field).
CLYDE LEAVITT, Acting Chief.

DWIGHT BUSHNELL, Forest Supervisor, District 1.
HARRY H. FRENCH, Forest Supervisor, District 2.
ROSS McMILLAN, Forest Supervisor, District 3.
H. F. STUDLEY, Forest Assistant, District 4.
WILLIS M. SLOSSON, Forest Supervisor, District 5.
G. B. COLEMAN, Forest Supervisor, District 6.

NATIONAL FORESTS.

(Numerals following National Forests indicate Inspection Districts.)

ALASKA.

Alexander Archipelago—**W. A. LANGILLE**, Forest Supervisor, Ketchikan. (6)
Afognak—**W. A. LANGILLE**, Forest Supervisor, Ketchikan. (6)
Chugach—**W. A. LANGILLE**, Forest Supervisor, Ketchikan. (6)

ARIZONA.

Baboquivari—**ROSCOE G. WILLSON**, Acting Forest Supervisor, Nogales. (3)
Black Mesa (N.)—**F. S. BREEN**, Forest Supervisor, Flagstaff; **J. H. ALLISON**, Forest Assistant; **WILLARD M. DRAKE**, Forest Assistant. (3)
Black Mesa (S.)—**DRAYTON C. MARTIN**, Acting Forest Supervisor, Clifton. (3)
Chiricahua—**C. T. MCGLONE**, Forest Supervisor, Douglas; **H. D. BURRALL**, Forest Assistant. (3)
Dragoon—**ROBERT J. SELKIRK**, Acting Forest Supervisor, Benson; **H. D. BURRALL**, Forest Assistant.
Grand Canyon (N.)—**SELDEN F. HARRIS**, Forest Supervisor, Kanab, Utah; **LORUM PRATT**, Deputy Forest Supervisor. (4)
Grand Canyon (S.)—**F. S. BREEN**, Forest Supervisor, Flagstaff; **J. H. ALLISON**, Forest Assistant; **WILLARD M. DRAKE**, Forest Assistant. (3)
Hnachuca—**ROSCOE G. WILLSON**, Acting Forest Supervisor, Nogales. (3)
Mount Graham—**THEO. T. SWIFT**, Acting Forest Supervisor, Safford. (3)
Pinal Mountains—**THEO. T. SWIFT**, Acting Forest Supervisor, Safford. (3)
Prescott—**F. C. W. POOLER**, Forest Supervisor, Prescott. (3)
San Francisco Mountains—**F. S. BREEN**, Forest Supervisor, Flagstaff; **J. H. ALLISON**, **WILLARD M. DRAKE**, and **R. F. BALTHIS**, Forest Assistants. (3)
Santa Catalina—**ROBERT J. SELKIRK**, Acting Forest Supervisor, Benson; **H. D. BURRALL**, Forest Assistant. (3)
Santa Rita—**ROBERT J. SELKIRK**, Acting Forest Supervisor, Benson; **H. D. BURRALL**, Forest Assistant. (3)
Tonto—**W. H. REED**, Forest Supervisor, Roosevelt. (3)
Tumacacori—**ROSCOE G. WILLSON**, Acting Forest Supervisor, Nogales. (3)

CALIFORNIA.

- Diamond Mountain**—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant. (5)
- Inyo**—A. H. HOGUE, Forest Supervisor, Bishop. (5)
- Klamath**—R. L. P. BIGELOW, Forest Supervisor, Yreka. (5)
- Lassen Peak**—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor; ALLAN R. POWERS, Forest Assistant. (5)
- Modoc**—C. E. RACHFORD, Acting Supervisor, Alturas. (5)
- Monterey**—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
- Pinnacles**—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
- Plumas**—L. A. BARRETT, Forest Supervisor, Quincy; ALLAN R. POWERS, Forest Assistant. (5)
- San Bernardino**—R. H. CHARLTON, Forest Supervisor, Los Angeles. (5)
- San Gabriel**—R. H. CHARLTON, Forest Supervisor, Los Angeles; Pasadena Planting Station—E. C. CLIFFORD, Pasadena. (5)
- San Jacinto**—J. R. BELL, Forest Supervisor, Hemet. (5)
- San Luis Obispo**—E. S. MAINWARING, Forest Supervisor, San Luis Obispo. (5)
- Santa Barbara**—STEPHEN H. DOUGLAS, Acting Forest Supervisor, Santa Barbara; San Marcos Planting Station—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara. (5)
- Shasta**—G. A. COLEMAN, Forest Supervisor, Sisson. (5)
- Sierra (N.)**—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS, JOHN MURDOCH, Jr., and N. F. MACDUFF, Forest Assistants. (5)
- Sierra (S.)**—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, F. B. KELLOGG, D. N. ROGERS, and C. M. GRANGER, Forest Assistants. (5)
- Sierra (E.)**—A. H. HOGUE, Forest Supervisor, Bishop. (5)
- Stanislaus**—S. L. N. ELLIS, Forest Supervisor, Sonora. (5)
- Stony Creek**—ERNEST BRITTEN, Acting Forest Supervisor, Elk Creek. (5)
- Tahoe**—MADISON B. ELLIOTT, Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant. (5)
- Trabuco Canyon**—J. R. BELL, Forest Supervisor, Hemet. (5)
- Trinity**—F. H. HAFLEY, Forest Supervisor, Weaverville. (5)
- Warner Mountains**—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)

COLORADO.

- Battlement Mesa**—DAVID ANDERSON, Forest Supervisor, Collbran. (2)
- Cochetopa**—EUGENE WILLIAMS, Forest Supervisor, Saguache. (2)
- Fruita**—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
- Gunnison**—WM. R. KREUTZER, Forest Supervisor, Gunnison; E. C. BERKY, Deputy Forest Supervisor. (2)
- Holy Cross**—JOHN McLAREN, Acting Forest Supervisor, Glenwood Springs; SWIFT BERRY, Forest Assistant. (2)
- La Sal**—ORRIN C. SNOW, Forest Supervisor, Moab, Utah. (2)
- Las Animas**—D. E. FITTON, Acting Forest Supervisor, La Veta. (2)
- Leadville**—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant. (2)
- Medicine Bow (Colo. Div.)**—HERBERT N. WHEELER, Forest Supervisor, Estes Park. (2)
- Montezuma**—ERNEST W. SHAW, Acting Forest Supervisor, Durango. (2)
- Ouray**—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
- Park Range**—THOMAS HOGAN, Forest Supervisor, Steamboat Springs. (2)
- Pikes Peak**—FRANK R. SHERWIN, Jr., Acting Forest Supervisor, Denver; W. J. MORRILL, Forest Assistant; Pikes Peak Planting Station—J. F. KÜMMEL, Forest Assistant, Colorado City. (2)
- San Isabel**—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
- San Juan**—F. C. SPENCER, Forest Supervisor, Monte Vista; A. A. PARKER, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant. (2)
- Uncompahgre**—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
- Wet Mountains**—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
- White River**—JAMES A. BLAIR, Forest Supervisor, Meeker. (2)

IDAHO.

- Bear River**—W. W. CLARK, Forest Supervisor, Logan, Utah; J. F. SQUIRES, Deputy Forest Supervisor. (4)
- Big Hole (S.)**—J. B. SEELY, Forest Supervisor, Sheridan, Mont. (1)

Bitter Root—F. A. FENN, Forest Supervisor, Kooskia. (1)
Cabinet (N.)—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
Caribou—J. T. WEDEMAYER, Forest Supervisor, Idaho Falls. (4)
Cassia—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Coeur d'Alene—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; ROY HEADLEY, J. E. BARTON, Deputy Forest Supervisors; DORR SKEELS, Forest Assistant. (1)
Henrys Lake—HOMER E. FENN, Forest Supervisor, St. Anthony; J. F. BRUNS, Forest Assistant. (4)
Kootenai—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
Lemhi (N.)—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
Lemhi (S.)—GUY B. MAINS, Forest Supervisor, Mackay. (4)
Palouse—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; DORR SKEELS, Forest Assistant. (1)
Payette—EMIL GRANDJEAN, Forest Supervisor, Boise; C. E. DUNSTON and O. M. BUTLER, Forest Assistants. (4)
Pocatello—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Port Neuf—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Priest River—R. L. FROMME, Acting Forest Supervisor, Priest River. (1)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Salmon River—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
Sawtooth—EMIL GRANDJEAN, Forest Supervisor, Boise; C. E. DUNSTON and O. M. BUTLER, Forest Assistants. (4)
Weiser—JOHN B. LAFFERTY, Forest Supervisor, Weiser; WALTER M. CAMPBELL, Deputy Forest Supervisor; C. G. SMITH, Forest Assistant. (4)
Yellowstone (Idaho Div.)—HOMER E. FENN, Forest Supervisor, St. Anthony; J. F. BRUNS, Forest Assistant. (4)

KANSAS.

Garden City—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr. (2)

MINNESOTA.

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake. (2)

MONTANA.

Big Belt—R. W. STUART, Forest Supervisor, Townsend. (1)
Big Hole (Anaconda Div.)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
Big Hole (N.)—C. K. WYMAN, Acting Forest Supervisor, Dillon; ROBT. J. MOORE, Deputy Forest Supervisor. (1)
Big Hole (S.)—J. B. SEELY, Forest Supervisor, Sheridan.
Bitter Root (Montana Div.)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Cabinet (N.)—D. G. KINNEY, Forest Supervisor, Libby. (1)
Cabinet (S.)—F. A. SILCOX, Acting Forest Supervisor, Thompson Falls. (1)
Crazy Mountains—E. C. RUSSELL, Forest Supervisor, Livingston. (1)
Ekalaka—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Elkhorn—R. W. STUART, Forest Supervisor, Townsend. (1)
Gallatin—DAVID CONKLING, Forest Supervisor, Bozeman. (1)
Helena—E. W. SEARCY, Acting Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant. (1)
Hell Gate (E.)—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
Hell Gate (W.)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Highwood Mountains—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
Kootenai—D. G. KINNEY, Forest Supervisor, Libby. (1)
Lewis and Clark (N.)—F. N. HAINES, Forest Supervisor, Kalispell. (1)
Lewis and Clark (S.)—PAGE S. BUNKER, Forest Supervisor, Kalispell. (1)
Little Belt—IRA E. TODD, Forest Supervisor, Neihart. (1)
Little Rockies—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
Lolo—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Long Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Madison—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Missoula—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)

Otter—A. C. McCain, Acting Forest Supervisor, Miles City. (1)
Pryor Mountains—H. W. THURSTON, Acting Forest Supervisor, Cody, Wyo. (1)
Snowy Mountains—IRA E. TODD, Forest Supervisor, Neihart. (1)
Yellowstone (Absaroka Div.)—E. C. RUSSELL, Forest Supervisor, Livingston. (1)

NEBRASKA.

Dismal River—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. Halsey Planting Station—WILLIAM H. MAST; assistant, LA MOREE BESLEY, Halsey. (2)
Niobrara—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. (2)
North Platte—C. A. SCOTT, Forest Supervisor, Halsey. (2)

NEVADA.

Charleston—DAVID BARNETT, Acting Forest Supervisor, Las Vegas. (4)
Independence—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Monitor—MARK G. WOODRUFF, Forest Supervisor, Austin. (4)
Ruby Mountains—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Tahoe—M. B. ELLIOTT, Forest Supervisor, Nevada City, Cal. (5)
Toiyabe—MARK G. WOODRUFF, Forest Supervisor, Austin. (4)
Toquima—MARK G. WOODRUFF, Forest Supervisor, Austin. (4)

NEW MEXICO.

Big Burros—R. C. McCLURE, Forest Supervisor, Silver City; DOUGLAS RODMAN, Forest Assistant. (3)
Gallinas—J. H. KINNEY, Acting Forest Supervisor, Capitan. (3)
Gila (N.)—JOHN KERR, Forest Supervisor, Magdalena. (3)
Gila (S.)—R. C. McCLURE, Forest Supervisor, Silver City; W. H. GODDARD, Deputy Forest Supervisor; DOUGLAS RODMAN, Forest Assistant. Fort Bayard Planting Station—W. B. HADLEY, Forest Assistant, Fort Bayard. (3)
Guadalupe—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JAMES, Forest Assistant. (3)
Jemez—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. (3)
Lincoln—J. H. KINNEY, Acting Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Fort Stanton. (3)
Magdalena—JOHN KERR, Forest Supervisor, Magdalena. (3)
Manzano—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Mount Taylor—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Pecos River—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. Las Gallinas Planting Station—S. Y. PARNAY, East Las Vegas. (3)
Peloncillo—C. T. McGLONE, Forest Supervisor, Douglas, Ariz. (3)
Sacramento—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JAMES, Forest Assistant. (3)
San Mateo—JOHN KERR, Forest Supervisor, Magdalena. (3)
Taos—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe. (3)

OKLAHOMA.

Wichita—W. R. MATTOON, Acting Forest Supervisor, Cache. (3)

OREGON.

Ashland—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Blue Mountains (E.)—HENRY IRELAND, Acting Forest Supervisor, Sumpter. (6)
Blue Mountains (W.)—A. S. IRELAND, Forest Supervisor, Prineville; CY. J. BINGHAM, Deputy Forest Supervisor. (6)
Bull Run—R. B. WILSON, Forest Supervisor, Portland; A. E. CONOON, Deputy Forest Supervisor. (6)
Cascade (N.)—R. B. WILSON, Forest Supervisor, Portland; A. E. CONOON, Deputy Forest Supervisor. (6)
Cascade (S.)—S. C. BARTRUM, Forest Supervisor, Roseburg. (6)
Coquille—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)

Goose Lake—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
Heppner—THOMAS E. CHIDSEY, Acting Forest Supervisor, Heppner. (6)
Imnaha—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa; HARVEY W. HARRIS, Deputy Forest Supervisor. (6)
Siskiyou—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Tillamook—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Umpqua—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash. (6)

SOUTH DAKOTA.

Black Hills—J. F. SMITH, Forest Supervisor, Deadwood; H. J. BROWN, Forest Assistant. (2)
Cave Hills—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Short Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Slim Buttes—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)

UTAH.

Aquarius—GEORGE H. BARNEY, Forest Supervisor, Escalante. (4)
Bear River—W. W. CLARK, Forest Supervisor, Logan; J. F. SQUIRES, Deputy Supervisor. (4)
Beaver—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Dixie—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George. (4)
Fillmore—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Fish Lake—N. E. SNELL, Forest Supervisor, Salina. (4)
Glenwood—N. E. SNELL, Forest Supervisor, Salina. (4)
Grantsville—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Manti—A. W. JENSEN, Forest Supervisor, Ephraim. (4)
Monticello—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Payson—WALTER F. BROUGH, Acting Forest Supervisor, Payson. (4)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello, Idaho. (4)
Salt Lake—E. H. CLARKE, Forest Supervisor, Salt Lake City; Wasatch Planting Station—N. J. FETTEROLF. (4)
Sevier—TIMOTHY C. HOYT, Forest Supervisor, Panguitch. (4)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo; D. S. MARSHALL, Deputy Forest Supervisor; WM. M. ANDERSON, Deputy Forest Supervisor. (4)
Vernon—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
Wasatch—E. H. CLARKE, Forest Supervisor, Salt Lake City. (4)

WASHINGTON.

Colville—W. W. CRYDER, Acting Forest Supervisor, Republic. (6)
Olympic—FRED HANSON, Forest Supervisor, Hoodspport. (6)
Priest River—R. L. FROMME, Acting Forest Supervisor, Priest River. (1)
Rainier—G. F. ALLEN, Forest Supervisor, Orting. (6)
Washington (E.)—G. W. MILLIAM, Forest Supervisor, Chelan. (6)
Washington (W.)—CHAS. W. ARMSTRONG, Acting Forest Supervisor, Sumas; B. P. KIRKLAND, Forest Assistant. (6)
Washington (Yakima Div.)—D. B. SHELLER, Forest Supervisor, Wenatchee. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla. (6)

WYOMING.

Bear Lodge—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak. (2)
Big Horn—W. E. JACKSON, Forest Supervisor, Big Horn. (1)
Black Hills—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.; H. J. BROWN, Forest Assistant. (2)
Caribou—J. T. WEDEMAYER, Forest Supervisor, Idaho Falls, Idaho. (4)
Crow Creek—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, JOHN H. BRIDGES, Forest Assistants. (2)
Medicine Bow (Wyo. Div.)—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
Sierra Madre—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo, Utah; D. S. MARSHALL, WM. M. ANDERSON, Deputy Forest Supervisors. (4)

Yellowstone (Shoshone Div.)—H. W. THURSTON, Acting Forest Supervisor, Cody; C. N. WHITNEY, Forest Assistant. (1)

Yellowstone (Teton Div.)—ROBT. E. MILLER, Forest Supervisor, Jackson. (4)

Yellowstone (Wind River Div.)—ZEPH JONES, Forest Supervisor, Pinedale. (4)

SERVICE CHANGES IN AUGUST.

APPOINTED.

Silviculture—

MANAGEMENT.—Robert A. MacMurray, forest assistant; Max Pfaender, forest agent; Max Rothkugel, forest agent.

Grazing—

Will C. Barnes, inspector, grazing.

Operation—

ORGANIZATION.—William McElroy, forest agent. (5)

PROMOTED.

Products—

WOOD UTILIZATION.—Miss Lulu Stewart, clerk.

Silviculture—

MANAGEMENT.—George E. Sawyer, forest agent.

SILVICS.—Mrs. L. Vane Rancke, clerk (translator); Miss Marie Simonson, clerk.

Operation—

MAINTENANCE.—John S. Hahn, jr., lithographer.

ORGANIZATION.—F. E. Bechtold, clerk; Harvey W. Harris, from deputy forest ranger to deputy forest supervisor, Imnaha National Forest, Oreg. (6); A. E. Cohoon, from forest assistant to deputy supervisor, Cascade Forest (N.), Oreg. (6); J. E. Barton, from forest assistant to deputy forest supervisor.

RESIGNED.

Products—

WOOD UTILIZATION.—Mr. Robert Rosenbluth, forest assistant.

Operation—

MAINTENANCE.—S. G. Statesman, laborer.

ACCOUNTS.—Miss Mattie M. Weaning, clerk.

ORGANIZATION.—J. G. Webb, forest guard, Sawtooth, Idaho (4); James Melrose, deputy forest ranger, San Juan, Colo. (2); Marshall F. Giffin, forest ranger, Blue Mountains (E.) Oreg. (6); Olney O. Green, forest ranger, Yellowstone (Wind River Div.), Wyo. (4); Arthur N. Marr, clerk, Sierra (N.), Cal. (5); C. C. Chisholm, forest guard, Cabinet (S.), Mont. (1); Charles Porter, forest guard, Weiser, Idaho (4); William Newman, forest guard, Payette, Idaho (4); R. B. Compton, forest guard, Rainier, Wash. (6); Frank H. Bush, forest guard, Cabinet (N.), Mont. (1); Frederick C. Brewster, forest guard, Colville, Wash. (6); Warren S. Haston, forest guard, Gila (S.), N. Mex. (3); W. K. McDaniel, forest guard, San Francisco Mountains, Ariz. (3); William R. Rozier, forest guard, Cœur d'Alene, Idaho (1); W. R. Stead, forest guard, Tahoe, Cal. (5); W. S. Jones, forest guard, Shasta, Cal. (5); Christian T. Balle, assistant forest ranger, Fish Lake, Utah (4); W. A. Hall, forest guard, Magdalena, N. Mex. (3); Lewis Hawkins, forest guard, Bear River, Utah (4); Chris. J. Johansen, forest guard, Salt Lake, Utah (4); F. L. Shaw, forest guard, Stanislaus, Cal. (5); Chester L. Woodward, forest guard, Independence; Richard L. Smith, deputy forest ranger, Ruby Mountains, Nev. (4); James P. Flynn, forest guard, Big Hole (S.), Mont. (1); George A. Cole, assistant forest ranger, Dixie, Utah (4); Wm. E. Berry, deputy forest ranger, Blue Mountains (E.), Oreg. (6); Jacob Simpson, assistant forest ranger, Black Hills, S. Dak. (2); Donald M. Rose, forest guard, Little Belt, Mont. (1); Guy Coulter, forest guard, Holy Cross, Colo. (2).

REINSTATED.

John D. Maxfield, assistant forest ranger, San Jacinto, Cal. (5).

SUSPENDED.

John K. Whiting, assistant forest ranger, White River, Colo. (2) ; B. F. McConnell, forest supervisor, Priest River, Idaho (1).

With deep regret announcement is made of the death on August 2 of Mr. Fred J. Bird, forest guard on the Cascade National Forest (Northern Division).

SERVICE NOTES FOR AUGUST.

OFFICE OF THE FORESTER.

LAW.

The attention of supervisors in South Dakota, Montana, Washington, Idaho, and Wyoming is called to the decision of the Secretary of the Interior in the case of *South Dakota v. Riley* (34 L. D., 657), noted in the Use Book at pages 222 and 223. Under this decision all trespasses committed on supposed school sections before their identification by survey and by the filing of the township plat in the local land office should be reported to the Forester. No lease or permit from the State will excuse the trespasser before the filing of the plat. This interpretation of the law was contested by the register of the State land board of Montana, Mr. John P. Schmit, and submitted to the attorney-general of the State, who advised the register, by letter dated June 17, that the State had no rights before survey. To the same effect is the decision of the supreme court of Montana in the case of *Clemmons v. Gillett* (33 Mont., 321; 83 Pac., 879).

An International Forest Fire—

The Secretary of State has called upon the Forest Service to furnish an expert to examine and report upon the damage done by a forest fire which started in connection with the work of resurveying the boundary line between Vermont and Canada, and which burned timber on both sides of the line. Eugene Bruce, expert lumberman, has made the examination for the Service, and his report will soon be transmitted to the Secretary of State.

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Card Record of Deposits and Timber Cut—

In recording the amount of timber cut on Form 615 (Timber Sale), the record should be cumulative, the full amount cut to date being given and not the amount cut since the last report or entry upon the card. The record of deposits, however, should not be cumulative, but should be a record of each separate payment, entered with the date and number of the certificate of deposit.

Advance Cutting—

When advance cutting is allowed in any timber sale, the Forest officer in charge of the sale should be furnished with a copy of the application before cutting begins.

Reports on Examinations of Class C Sales—

Many of the reports on timber-sale examinations are incomplete, since they fail to recommend the manner in which the sales should be handled. This is an essential part of the report and should in no case be omitted. (See page 77 of "The Use Book.") The Forest officer who makes the examination must determine, while on the ground, (1) whether or not the sale should be made; and (2), if the sale is recommended, how the timber should be cut and removed in order to leave the cutting area in good condition. His report should cover the

following subjects: (1) The needs of the tract and the objects to be gained from the marking; (2) an outline of the manner in which the different types should be marked in order to accomplish these results; (3) special regulations regarding the disposal of brush, protection of the remaining stand, place of scaling, and any other points that should be included in the contract. The Supervisor should approve these recommendations with any additions or modifications that he considers advisable and submit it with the formal application for the Forester's approval.

Variation of Diameter Limit in Timber Sales—

Forest officers should inform applicants and purchasers of timber from the National Forests that the Forest Service does not guarantee that the estimated amount of timber can be cut from the area covered by the application or contract, and also, if diameter limits are specified in the application or contract, that the diameter limits are approximate and will be varied wherever necessary in the judgment of the Forest officers. Before the execution of any contract, prospective purchasers should be shown, whenever possible, exactly how the timber will be marked. Forest officers should explain that it may be necessary slightly to modify the method of marking if the conditions after the cutting actually begins seem to demand it.

Transactions to be closed—

In order to insure the prompt closing of all free use, timber sale, timber trespass, and other transactions upon the National Forests, officers in charge will please adopt the following system of reminders:

The date of the expiration of all permits and contracts covering a period of not more than one year should be entered on a desk calendar. For instance, a free-use permit dated August 1, 1907, to cover a period of three months, should be entered under date of November 1. This does not apply to the larger transactions which cover long periods of time.

OFFICE OF SILVICS.

New Forest Literature—Compiled by the Librarian.

The publications announced in this list consist of those on file in the Service library.

Forest Botany—

- New east American thorns; W. W. Ashe. 1902. 12 p. From Journal of Elisha Mitchell scientific society, 18th year, pt. 1, 1902.
- New North American thorns; W. W. Ashe. 1903. 22 p. From Journal of Elisha Mitchell scientific society, 19th year, pt. 1, 1903.
- Some new Pennsylvania thorns; W. W. Ashe. 1902. 12 p. From Annals of the Carnegie museum, vol. 1, pt. 3, May, 1902.

Silvics—

- Some fundamental principles of silviculture; H. Mayr. 1907. 16 p. From Forestry quarterly, vol. 5, 1907.

Educational—

- Classified list of publications available for distribution July 20, 1907; Forest service. 4 p.

Forest Management—

Volume and Yield—

- Form und Inhalt der Weissföhre (Form and volume of the pine); A. Schiffel. 1907. 89 p. W. Frick, Wien.
- Über die Kubierung und Sortierung stehender Nadelholzschäfte (On determining the cubic contents and grades of standing coniferous timber); A. Schiffel. 1906. 13 p. From Centralblatt für das gesamte forstwesen, no. 12, 1906.
- Zuwachsaotograph (Instrument for measuring the increment of trees); J. Friedrich. 1905. 7 p. Illus. From Centralblatt für das gesamte forstwesen, no. 11, 1905.

Forest Management—Continued.**Planting—**

- Evergreens for South Dakota; N. E. Hansen. 1907. 62 p. Illus. Bulletin 102 of the South Dakota agricultural experiment station, Brookings, S. Dak.
 Die Keimprüfungsdauer einiger Koniferen (The length of time required to test the germinating power of the seeds of various conifers); E. Zederbauer. 1906. 10 p. From Centralblatt für das gesamte Forstwesen, no. 7, 1906.
 Suggestions for forest planting on the semiarid plains; Forest service. 1907. 15 p. Circular 99.

Organization and Administration—

- Connecticut—State forester. Annual report for 1906. 1907. 26 p. In report of the Connecticut agricultural experiment station, 1906, pt. 6.
 India—Punjab—Forest department. Progress report of forest administration for the year 1905-6. 1906. 83 p. Lahore.
 Ontario—Department of lands, forests, and mines. Report for the year 1906. 1907. 154 p. Toronto.

National and State Forests—

- Location, date of latest proclamation, and area of the national forests in the United States, Alaska, and Porto Rico; Forest service. 1907. 4 p.

Land Policy—

- The way of the land transgressor; L. Pease. 1907. 19 p. Illus. In Pacific monthly, Aug., 1907.

Utilization—**Wood Preservation—**

- Brush and tank pole treatments; C. G. Crawford. 1907. 24 p. Illus. Circular 104 of the Forest service. Seasoning of telephone and telegraph poles; H. Grinnell. 1907. 16 p. Circular 103 of the Forest service.

Statistics—

- Production of lumber, lath, and shingles, by states and species, 1906, 1905, and 1904; Bureau of the census and Forest service. 1907. 1 p.

Street and Park Trees—

- Newark—Shade tree commission. Third annual report, 1906. 27 p. Illus.

Forest Enemies—**Insects—**

- White marked tussock moth and elm leaf beetle; E. P. Felt. 1907. 14 p. Illus. Bulletin 109 of the New York state museum, Albany, N. Y.

Diseases of Trees—

- Fichtenkrebs (Spruce canker); E. Zederbauer. 1906. 5 p. Illus. From Centralblatt für das gesamte forstwesen, no. 1, 1906.

Frost—

- Über den Einfluss des Frostes auf den Durchmesser lebender Bäume (The influence of frosts on the diameter of living trees); J. Friedrich. 1907. 8 p. From Centralblatt für das gesamte forstwesen, no. 5, 1907.

Deforestation—

- Observations and investigations by J. W. Toumey and W. K. Prentice, and pictures produced from photographs taken in the San Bernardino forest reserve, April 17, 1907; Tricounties reforestation committee. 15 p. Illus.

Periodicals—Articles of Special Interest—

- New York Lumber Trade Journal, Aug. 15, 1907.—Statistics on cut of New York woods by species, p. 11.
 American Lumberman, Aug. 10, 1907.—Timber resources of the producing States and regions, p. 30; Transportation of logs by the "alligator tug," p. 43.
 Timber Trades Journal, Aug. 3, 1907.—Totara and matai, two valuable New Zealand conifers, p. 154.
 West Virginia Lumberman, Aug. 10, 1907.—Oregon forests disappearing, p. 25.
 Southern Lumberman, Aug. 10, 1907.—How to secure State forest reserves, p. 21.
 St. Louis Lumberman, Aug. 1, 1907.—Canada's timber supply, p. 69.
 International Cooperage News, Aug. 1, 1907.—Successful tests of slag cross-ties, p. 12.
 Canada Lumberman, Aug., 1907.—Pneumatic logging saw, p. 15; The proper season for cutting hickory, p. 15; Timber supply and lumber production of Japan, p. 21.
 Southern Lumber Journal, Aug. 1, 1907.—Cross-tie supply fast diminishing, p. 30; The steel tie question, p. 39.
 The Paper Mill and Wood Pulp News, July 27, 1907.—Proposed export duty on Canadian pulp logs, p. 2; Proposition to insure timber lands in Michigan, p. 7; Steps taken by the Canadian government in regard to forestry, p. 14.
 Wood Craft, Aug., 1907.—Wood bending, p. 130.
 Lumber Review, Aug., 1907.—Wine casks of redwood, p. 10; Some uses for cypress, p. 49; Tupelo for coffin wood, p. 49.
 Lumber World, Aug. 1, 1907.—Yellow pine weights, p. 15; Logging by compressed air, p. 31.
 Timber Trades Journal, July 20, 1907.—New Zealand white pine, p. 81.
 Southern Lumberman, Aug. 3, 1907.—Comparison of manufacture of cooperage and lumber as regards profit, p. 24.

Periodicals—Articles of Special Interest—Continued.

- New York Lumber Trade Journal, Aug. 1, 1907.—How the national forests will partly offset the coming shortage, p. 10; Pennsylvania Railroad to use no more steel ties, p. 23; New Jersey State board of forestry acquires 5,000 acres for a forest reserve, p. 44.
- American Lumberman, July 27, 1907.—Canada's pulpwood supply, p. 30; The cost of wood distillation and the prices of its products, p. 37; Value of yellow pine as a structural timber, by M. Cline, p. 38.
- Hardwood Record, July 25, 1907.—The manufacture of veneers, p. 21; A new Belgian wood preservative, injectol, p. 24.
- The Paper Mill and Wood Pulp News, July 13, 1907.—Forestry in Great Britain, p. 16.
- Southern Industrial and Lumber Review, July, 1907.—Redistilling wood alcohol, p. 17; Ranges of Texas trees, p. 28; The electric motor in sawmill work, p. 35; Electrical dry kiln, p. 36; Timber resources of Texas, p. 39; Properties of tropical woods, p. 47; Afforestation in Japan, p. 53; Timber for matches, p. 57; Wood used for fiddles, p. 66.
- American Lumberman, July 20, 1907.—Wood distillation, an historical review, p. 40.
- Wood Worker, July, 1907.—Practical seasoning, p. 43.
- Southern Lumberman, July 20, 1907.—Woods for vehicle construction, p. 20.
- Pacific Lumber Trade Journal, July, 1907.—Strength of fir bridge stringers, p. 14.
- Lumber Trade Journal, July 15, 1907.—Evolution of the sawmill, p. 22.
- Packages, July, 1907.—Merits of Spanish cedar, p. 36.
- Canada Lumberman, July, 1907.—Logging on steep grades, p. 23.
- American Lumberman, July 13, 1907.—Wood pulp mortar, p. 29; Japanese oak, p. 29; Piling in the retail yards, p. 30; Timber prospects in Mexico, p. 49; Quebec's timber resources, p. 50 D.
- National Coopers' Journal, July, 1907.—Utilizing waste at a hoop factory, p. 6; Strong arguments in favor of the Appalachian reserve, by H. M. Hale, p. 10; California redwood v. white oak for cooperage stock, p. 11.
- Hardwood Record, July 10, 1907.—Distribution of hardwoods, p. 13; Eucalyptus globulus, p. 16; Walnut burls for veneers, p. 22; German forests, by C. A. Schenck, p. 23.

BRANCH OF GRAZING.

All business in connection with the issuance of special-use permits for drift fences, pastures, etc., and hay sales has been transferred from the section of special uses, Branch of Operation, to the section of fences, Branch of Grazing, in which all such special-use business will hereafter be handled.

Vaccine from Bureau of Animal Industry—

The Bureau of Animal Industry has agreed to recognize all applications for vaccine presented by stock owners grazing stock within the National Forests. Applications should be made through the supervisor, stating the disease to be treated, and the number of stock to which the treatment is to be given. Upon receipt of an application the supervisor will see that it is in proper form, and not unreasonable, after which he should approve it, and forward it to the Bureau of Animal Industry, Washington, D. C. Supervisors are requested to give ample publicity to this fact and to advance the work of the Bureau of Animal Industry in its efforts to reduce stock diseases as much as possible by a proper distribution of the vaccine.

BRANCH OF OPERATION.

OFFICE OF MAINTENANCE.

Shipping Points—

Considerable difficulty has been experienced by supervisors whose headquarters are at places remote from the railroad in the receipt of freight and express shipments. This could largely be avoided if the officers would notify the property clerk of shipping points more convenient to them than those to which goods have been shipped in the past.

OFFICE OF ACCOUNTS.

Proper Use of Form 2a Required—

Supervisors are not filling out Form 143 which accompanies Form 2a, as required in circular letter dated January 5, 1907.

Care must be taken to insert in the proper columns indicated by the printed heading whether the absence is on account of annual or sick leave, leave without pay, or furlough.

Whenever services are rendered for broken periods by any employee of the service, including temporary laborers, the number of days absent should be stated in the proper column under the heading "Absence from duty."

This information is absolutely necessary to complete the Form 2a before the pay roll can be approved for payment.

OFFICE OF LANDS.

Boundaries—Administrative Sites—

Attention is called to Service Order 5, printed in this issue.

All recommendations for administrative sites should be submitted upon the form prepared for that purpose. A supply of this form was mailed to the supervisors in Office letter (OB) dated August 15. The report must be made upon the form or a typewritten copy of it. It should state whether the site lies within the National Forest or outside of it. The Forester will be glad to receive suggestions from the supervisors in regard to any desirable changes in this form.

Whenever these sites are referred to as a general class, the term "Administrative sites" should be used. When, however, specific cases are referred to, they should be designated by a term indicating the nature of the site, as, for instance, "Ranger station," "Nursery site," "Reservoir site," or "Road site" (when a tract is withdrawn to secure a right of way).

Reports on Claims—

A large majority of reports on claims by Forest officers fail to name the Land District in which the land is situated. The name of the district should in every case be given, since it greatly expedites the handling of reports, both in the Office of Lands, Forest Service, and, especially, in the General Land Office.

Reports on Agricultural Entries—

Reports on agricultural entries should be made out on new Form 655, and Forest officers should supply themselves with this form, as well as the latest Form 654, covering Mineral Claims, and Form 175, covering a mill-site claim.

Where an adverse report is made on a homestead claim, and the defect is non-compliance with law as to continuous residence on the land—abandonment of it—the report should, whenever possible, contain the name of one or more persons who may be relied on as witnesses.

Special Uses—

Unavoidable delay occurred in mimeographing and mailing the circular upon special uses, dated July 19. The circular is intended to be distributed by the supervisors to all Forest officers, and a sufficient number of copies for that purpose has been sent to the supervisors, who are requested to distribute them accordingly.

OFFICE OF ORGANIZATION.

Tool Boxes for Fire-Fighting Implements—

On the San Gabriel and San Bernardino Forests tool boxes have been constructed and placed at various central points throughout the Forests. They are something like piano boxes, painted red and suitably labeled, and are supplied with a padlock. In these boxes are kept a full set of fire-fighting

implements. The key is left at the nearest ranch or cabin. This is an excellent scheme and one which should be put into effect on many of the National Forests. Where letters of authorization for general expenses are insufficient for this purpose, the necessary funds will be allotted from the permanent improvement fund on receipt of estimates in proper form from supervisors. Blueprints showing the general plan of the boxes suggested have been prepared and may be had on request to the Forester.

Since there seems to be more or less difficulty in identifying Government tools after a fire has been extinguished, especially in case a good many settlers have helped fight the fire, it is suggested that handles of Government tools be painted red or otherwise marked in some very definite way. This will render it unnecessary for rangers to examine each tool minutely in order to find the Forest Service stamp.

OFFICE OF ENGINEERING.

Improvements on Administrative Sites—

In making estimates for improvements on administrative sites, supervisors should be very careful to give the name of the site and also, where the land is surveyed, to describe by legal subdivisions the land on which the expenditure is to be made. This will greatly facilitate checking to see whether withdrawal has been requested in accordance with National Forest Order 23, Part IV.

Local Surveyors for Administrative Sites—

Attention is called to the fact that where the local force is inadequate to handle the survey of administrative sites, allotment may be made for the hire of local surveyors to do this work in extreme cases. Supervisors are also urged, wherever necessary, to hire help, in addition to the regular force, for carrying on all kinds of permanent improvement work. The fact can not be too strongly emphasized that the permanent improvement fund will not be available after June 30, 1908, except in cases where contracts have previously been made. Expenditures must not, of course, be made in advance of authorization. The necessary funds will be allotted wherever possible on receipt of estimates made in proper form.

SERVICE ORDERS.

SERVICE ORDER 3.

AUGUST 16, 1907.

Revision of Instructions Under Grazing Regulations.

To Forest Supervisors:

The following amendments are hereby made in the general information given by "The Use Book" for 1907 in reference to grazing regulations:

On page 96, in the information under Regulation 40, the second paragraph is amended to read:

The supervisor may allow stock to enter not more than fifteen days in advance of the date fixed for the beginning of the grazing period, *or allow it to remain fifteen days after the expiration of the regular grazing period*, when the needs of the people demand such action and the condition of the range warrants it.

On page 116 the last sentence of the first paragraph is amended to read:

The reservoirs will be kept in repair by the permittee, and will remain the property of the United States.

The words "and will be opened to other stock on the Forest" have been stricken out, as it is the intention to allow stockmen the privilege of fencing stock-watering reservoirs built by them on portions of the range to the exclusive use of which they are entitled.

Forest officers will please note these changes and act in accordance with this revision of the regulations.

JAMES B. ADAMS,
Acting Forester.

SERVICE ORDER 4.

(Amends National Forest Order No. 23.)

SEPTEMBER 1, 1907.

Administrative Sites.

No site should be selected which is in whole or in part actually occupied or used in good faith for agricultural or mining purposes or for a home, whether the claim is legally valid or not, unless no other suitable tract is available for the purpose in view. If such a tract is selected because no other tract is suitable that fact should be stated and explained in detail, and a report on the claim, on the proper form, should accompany the recommendation for withdrawal. All possible consideration should be shown to such occupants and users, and for this purpose full report should be made of all facts as to the occupancy; the kind, condition, and value of the improvements, and the good faith of the claimant. The Forester will carefully consider the validity of the claim and, even if it is technically invalid, the propriety of paying for the improvements and securing a relinquishment, or of confining the site to the unimproved portion of the claim. If there are no claims on the sites recommended this fact should be stated. Conflicts with homestead applications under the act of June 11, 1906, should be avoided if possible. When they can not be avoided they should be dealt with in the spirit of the above instructions.

JAMES B. ADAMS,
Acting Forester.

SERVICE ORDER 5.

SEPTEMBER 1, 1907.

Claims—Procedure.

1. Your attention is called to the circular of the General Land Office, dated June 26, 1907, as to the contesting of land claims in National Forests. (Copy annexed.)

2. The procedure authorized by the circular of June 26 does not displace that hitherto in use. (See Use Book, pp. 32-39.) The Forest Service may proceed by either method, at its option. The local land officers are required, in accordance with the General Land Office circular of August 1, 1905 (copy annexed), to furnish the Forest officers with a copy of the notice of intention to make final proof.

3. Under ordinary circumstances the old procedure will be followed and the supervisor's report upon the claim will be transmitted to the Forester and by him to the Commissioner of the General Land Office, for appropriate action. If the peculiar circumstances of any case make it necessary to initiate a contest before the local land office, the supervisor should proceed under the circular of June 26.

4. The complaint under the circular of June 26 need not be under oath, but it should be verified by the Forest officer, who should sign it and give his address. It should describe the claim by section, township, and range, if surveyed; or by reference to fixed objects, if unsurveyed. If a filing has been made for the claim, the number of the filing or entry should be given. The name and address of the claimant should also be given. The complaint should state sufficient facts to warrant the rejection of the claim and the cancellation of the entry, if there is one.

5. Upon the filing of the complaint the local land officers will assume jurisdiction and take such action upon the complaint as the facts warrant. They will issue all notices and direct all proceedings. The General Land Office circular of February 14, 1906 (copy annexed), will govern the proceedings taken in such cases.

6. Forest officers are not authorized to incur any expense for the attendance or mileage of witnesses, for the service of notices, or for any other matter connected with the contest. They should, however, upon request, assist in serving notices and subpoenas issued by the local land officers in any proceedings taken under this circular. Subpoenas are not required to be served upon Forest officers in such cases. They will attend hearings, if possible, upon notice given by the local land officers. If they can not attend they should so inform the local land officers. Personal expenses for traveling and subsistence may be incurred in the performance of these duties.

7. When a complaint is filed a copy should be immediately transmitted to the Forester with report upon the claim on Form 175, 654, or 655, and statements of the evidence to be given by each witness for the Government. These statements should, if possible, be in the form of affidavits signed and sworn to before a Forest officer by the witnesses.

8. The affidavits or statements should set forth every material fact with relation to the claim. The place where the affidavit is taken, and the name and address of the affiant should be given, and it should be signed by the officer before whom the affidavit is taken.

9. Forest officers should endeavor to obtain competent and reliable persons to appear as witnesses in support of their findings. They should, upon request, furnish to the local land officers the names and addresses of such witnesses, so that subpoenas may be issued for their attendance at hearings.

10. If the Forest officer is unable to be present at the final proof and knows the claim should not be passed to patent, whether he has so reported to the Forester or not, he should, in addition to the questions to be furnished the examining officer, as provided for in the Use Book, page 33, also file a complaint against the acceptance of the final proof, instead of filing protest.

11. Forest officers should fully cooperate with the local land officers and the special agents of the General Land Office in all matters relating to or affecting the validity of claims to lands in the National Forests. They should furnish them all information required in the proper conduct of proceedings upon their reports, and if necessary should assist in making such supplemental examinations as may be required in such proceedings.

12. In making examinations of mining claims the requirements of the Use Book must be closely observed. In the examination of all agricultural claims all absences should be carefully noted and the reasons for them given. If possible an affidavit or statement should be obtained from the claimant to assist the reviewing officers.

13. Reports on all kinds of agricultural claims should be made on Form 655, with such changes as are necessary to show the facts. Great care should be taken to fully state the character of the claim, whether it is a squatter claim, location, filing, application, or entry. If an entry, the report should show whether or not final certificate has issued and the number and date of issuance.

14. The success of the proceedings against claims will depend upon the show-

ing made by the Forest officers in their proofs and at the hearings. In order to defeat a claim it will be necessary to clearly establish by a preponderance of the evidence that the claimant has not complied with the law.

15. Claims against which action may be taken by examination and report to the Forester, as hitherto practiced, or by complaint under the circular of June 26, include all assertions of right or title to land in National Forests whether by the filing of an application, entry, location, or other writing, in the local land office, county records, or elsewhere, or by posting notice on the ground, or by occupancy or otherwise. If the Forest officer believes that the claimant settled unlawfully upon lands withdrawn for National Forest purposes and is making unlawful use of the lands claimed by him, or is injuring National Forest interests, action should be taken at once without waiting for notice of final proof.

JAMES B. ADAMS,
Acting Forester.

Regulations governing Hearings respecting Claimed Rights under the Public Land Laws within National Forests.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
June 26, 1907.

To Registers and Receivers and

Special Agents of the General Land Office:

The following circular is substituted for circular of May 3, 1907:

1. A Government officer in charge of any National Forest may initiate a contest or other proceedings before the Land Department respecting the unlawful occupation or use of land within a National Forest by reason of a claim made thereto under any of the public land laws.

2. As a basis for such proceeding, such officer shall file, in the local land office for the district in which the lands involved are located, a complaint signed by him in his official capacity, but not under oath or corroborated, setting forth facts respecting the alleged unlawful occupation or use of the public lands.

3. Upon filing of a sufficient complaint in any case in which final certificate has not issued, the register and receiver will issue a notice with a copy of such complaint attached thereto to the defendant, notifying him that unless he, within thirty days from the receipt of such notice, files in their office a denial or answer to such charges in writing and under oath, the truth of such charges will be taken as confessed by him, and any entry, filing, or claim asserted to such land, under the land laws by such party, may be declared forfeited or canceled without further notice to him.

4. When a complaint has been filed respecting any claim upon which final certificate has issued, or where denial under oath is filed in answer to a notice issued under the preceding paragraph, the same will be at once forwarded to the Commissioner of the General Land Office and the further progress of the matter will be in accordance with the circular of February 14, 1906, defining the manner of proceeding upon special agent's reports.

Very respectfully,

FRED DENNETT,
Acting Commissioner.

Approved June 26, 1907.

GEORGE W. WOODRUFF, *Acting Secretary.*

Final Proof on Claims Within Forest Reserves.

[CIRCULAR.]

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., August 1, 1905.

Registers and Receivers, United States Land Offices:

GENTLEMEN: Attention is called to the following reissue of the circular of April 8, 1905, with additions thereto suggested by the Forestry Bureau, Department of Agriculture. The original circular is in full force and effect, the reissue

being deemed necessary to more fully emphasize the purpose of the original circular.

(1) Hereafter you will, when issuing notice of intention to make final proof upon claims, either mineral or nonmineral, within an established forest reserve, furnish a copy thereof to the Forest Supervisor in charge of such reserve in order that he may be enabled to be present at the taking of final proof to examine and cross-examine claimant and his witnesses, or may protest the passage of the mineral application to entry, as the case may be. In the former case, whenever the Supervisor may deem it necessary, the examination may be reduced to writing at the cost of the claimant, and made a part of the final proof in that case. You will request the Forest Supervisor to make proper return of the proof notice, to be made a part of the case with such notations thereon as he may consider best.

(2) You will carefully examine any proofs for claims within forest reserves, whether mineral or nonmineral, together with any evidence furnished by the Forest Supervisor or brought out by his examination, and either reject, suspend, or approve the same according to the following directions:

(3) If sufficient facts appear upon the face of the record, you will reject the final proof, advising claimant of your reasons therefor, with the right of appeal. No further action thereon will be required from the Forest Supervisor.

(4) If you believe the proof to be fraudulent or doubtful, but do not have sufficient reasons to justify its rejection, or if the Forest Supervisor has returned the notice with a definite protest against the claim, you will suspend the proof and submit a brief statement of the facts in the case to the special agent in charge of the district in which said proof is made, such statement to include the names and addresses of claimants and witnesses, and your reasons for the suspension of the proof. You will forward the proof to this office with a copy of your letter to the special agent. The special agent will then proceed to make such investigation as he may deem necessary, and to submit his report on the approved form. Upon the receipt of his report, appropriate action will be taken upon the entire record as then made up.

(5) If you believe the proof to have been made in good faith and that the law has been in all respects complied with, you will pass such proof to entry in the regular order, upon compliance by the claimant with all the requirements therein and on the payment of fees and commissions, but you will in no case issue final certificate or pass a mineral application to entry when any definite protest by a forest officer has been made against the claim.

(6) You will promptly notify the Forest Supervisor of whatever action you take in every case.

(7) The names and addresses of Forest Supervisors will be furnished you by this Office. Notices of claims in forest reserves in which there is no forest officer in charge should be forwarded to the Forester, Agricultural Department, Washington, D. C.

Very respectfully,

J. H. FIMPLE,
Acting Commissioner.

Approved:

THOS. RYAN, *Acting Secretary.*

Instructions—Manner of Proceeding upon Special Agents' Reports.

DEPARTMENT OF THE INTERIOR,
GENERAL LAND OFFICE,
Washington, D. C., February 14, 1906.

To Special Agents and Registers and Receivers, United States Land Offices:

The following rules are prescribed for the government of proceedings had upon the reports of special agents of this Office. All existing instructions in conflict herewith are superseded.

1. The purpose hereof is to secure speedy action upon special agents' adverse reports upon claims to the public lands, and to allow entryman, or other claimant of record, opportunity to file a denial of the charges against the entry or claim, and to be heard thereon if he so desires.

2. Upon receipt of the special agents' report this Office will consider the same and determine therefrom whether the charges, if true, would warrant the rejection or cancellation of the entry or claim.

3. Should the charges, if not disputed, justify the rejection or cancellation of the entry or claim the local officers will be duly notified thereof and directed to issue notice of such charges in the manner and form hereinafter provided for, which notice must be served upon the entryman and other parties in interest shown to be entitled to notice.

4. The notice must be written or printed and must state fully the charges as contained in the letter of this Office, the number of the entry or claim, subdivision of land involved, name of entryman or claimant or other known parties in interest.

5. The notice must also state that the charges will be accepted as true, (a) unless the entryman or claimant files in the local office within thirty days from receipt of notice a written denial of said charges with an application for a hearing, (b) or if he fails to appear at any hearing that may be ordered in the case. If the entryman or claimant applies for a hearing he may indicate therein the time and place for such hearing, subject to the approval of the local officers, the time to be not less than sixty days from date of his application therefor.

6. Notice of the charges may be personally served upon the proper party by the local officers at their office, but if this can not be done they will deliver the notice to the special agent for service under the rules. If the special agent can not secure personal service, notice may be served, upon sufficient showing by the special agent or other qualified person, by publication. The register will require such publication to be made under the rules.

7. If a hearing is asked for, the local officers will consider the same and confer with the special agent relative thereto and fix the hearing for the date and place stated in the application, if practicable under the rules, due notice of which must be given entryman or claimant. The above notice may be served by registered mail.

8. The special agent will duly submit, upon the form provided therefor, to the receiver of public moneys, an estimate of the probable expense required on behalf of the Government. The special agent will also serve subpoenas upon the Government witnesses and take such other steps as are necessary to prepare the case for prosecution.

9. The special agent must appear with his witnesses on the date and at the place fixed for said hearing, unless he has reason to believe that no appearance for the defense will be made, in which event no appearance on behalf of the Government will be required. The special agent must, therefore, keep advised as to whether the defendant intends to appear at the hearing.

10. If the entryman or claimant fails to apply for a hearing, or fails to appear at the hearing ordered, without showing good cause therefor, such failure will be taken as an admission of the truth of the charges contained in the special agent's report and will obviate any necessity for the Government's submitting evidence in support thereof.

11. Upon the day set for the hearing and the day to which it may be continued the testimony of witnesses for either party may be submitted, and both parties, if present, may examine and cross-examine the witnesses, under the rules, the Government to assume the burden of proving the special agent's charges.

12. If the entryman or claimant fails to apply for a hearing or to appear at a hearing applied for, as provided in paragraph 10, or if a hearing is had, as provided in paragraph 11, the local officers will render their decision upon the record, giving due notice thereof in the usual manner.

13. Appeals or briefs must be filed under the rules but need not be served upon the special agent, nor will the special agent file any appeal or brief unless directed to do so by this office.

14. The above proceedings will be governed by the Rules of Practice. All notices served on claimants or entrymen must likewise be served upon transferees or mortgagees, as provided in Rule 8½ of Practice.

Very respectfully,

W. A. RICHARDS, *Commissioner.*

Approved:

E. A. HITCHCOCK, *Secretary.*

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR OCTOBER, 1907.

This program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Principal Examiner.

HERBERT A. SMITH, Editor.

GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, Chief Inspector, Missoula, Mont.

P. G. REDINGTON, Inspector, Missoula, Mont.; F. A. SILCOX, Inspector, Thompson Falls, Mont.; GEO. H. CECIL, Inspector, Missoula, Mont.; C. H. ADAMS, Inspector, Missoula, Mont.

Inspection District 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, Kansas, Southeastern Montana, and Southeastern Utah.

SMITH RILEY, Chief Inspector, Denver, Colo.

R. P. IMES, Inspector, Denver, Colo.; T. D. WOODBURY, Inspector, Denver, Colo.; F. W. MORRELL, Inspector, Denver, Colo.

Inspection District 3.—Arizona, New Mexico, and Oklahoma.

D. D. BRONSON, Chief Inspector, Albuquerque, N. Mex.

T. S. WOOLSEY, Jr., Inspector, Albuquerque, N. Mex.; W. R. MATTOON, Inspector, Cache, Okla.; A. O. WAHA, Inspector, Albuquerque, N. Mex.; WILL C. BARNES, Inspector, Albuquerque, N. Mex.

Inspection District 4.—Utah, Southern Idaho, Western Wyoming, Eastern Nevada, and Northern Arizona.

R. E. BENEDICT, Chief Inspector, Salt Lake City, Utah.

F. W. REED, Inspector, Salt Lake City, Utah; J. M. FETHEROLF, Inspector, Salt Lake City, Utah.

Inspection District 5.—California and Western Nevada.

F. E. OLMSTED, Chief Inspector, San Francisco, Cal.

COERT DU BOIS, Inspector, San Francisco, Cal.; J. H. HATTON, Inspector, San Francisco, Cal.; WM. C. HODGE, Jr., Inspector, San Francisco, Cal.; G. W. PEAVY, Inspector, San Francisco, Cal.; S. J. FLINTHAM, Inspector, San Francisco, Cal.; J. K. CAMPBELL, Inspector, San Francisco, Cal.

Inspection District 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, Chief Inspector, Portland, Oreg.

M. L. ERICKSON, Inspector, Portland, Oreg.; W. H. B. KENT, Inspector, Portland, Oreg.; F. E. AMES, Inspector, Portland, Oreg.

White Mountain and Appalachian Investigation: WM. L. HALL, *Assistant Forester*, in Charge; assistants, A. K. CHITTENDEN and W. W. ASHE.

E. S. BRUCE, *Expert Lumberman and Special Inspector*, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. COX, Assistant Forester, in Charge.

OFFICE OF MANAGEMENT.

E. E. CARTER, Chief.

W. G. WEIGLE, Assistant Chief.

Timber Sales, E. H. CLAPP, Chief.

G. M. HOMANS, Assistant Chief.

Timber Sale Correspondence.

Districts 1, 2, and 4—L. L. WHITE, R. Y. STUART.

District 3—A. B. RECKNAGLE, G. P. BARD.

District 5—J. F. ELDRIDGE, P. T. HARRIS.

District 6—J. P. HUGHES.

FRED LEES—*Trespass.*

Temporary assignments for work on important sales under the direction of supervisors:

W. T. ANDREWS, Lumberman, Boise, Idaho.

J. S. BAIRD, Lumberman, Cass Lake, Minn.

M. BURNS, Lumberman, Cass Lake, Minn.

GEO. L. COTT, Lumberman, Albuquerque, N. Mex.

GEO. P. GREGG, Lumberman, Keystone, Wyo.

W. E. LA FOUNTAIN, Lumberman, Washington, D. C.

W. R. MCKINNON, Lumberman, Cass Lake, Minn.

A. J. NORTON, Lumberman, Kalispell, Mont.

F. X. SALZMAN, Lumberman, Big Horn, Wyo.

E. M. HAMILTON, Lumberman, Deadwood, S. Dak.

C. A. GALARNEAU, Forest Assistant, Sisson, Cal.

C. S. JUDD, Forest Assistant, Quincy, Cal.

H. C. NEEL, Forest Assistant, Deadwood, S. Dak.

I. T. WORTHLEY, Forest Assistant, Delta, Colo.

D. T. MASON, Forest Assistant, Durango, Colo.

J. F. PRESTON, Forest Assistant, Sumas, Wash.

W. D. STERRETT, Forest Assistant, Silver City, N. Mex.

J. D. WARNER, Forest Assistant, Washington, D. C.

Reconnaissance, S. J. RECORD.

Montana—

Preparation of volume table for western larch—LOUIS MARGOLIN and J. REBMAN, Kalispell, Mont.

Washington—

Working plan for Chelan Basin—MAX ROTHKUGEL.

Cooperation, J. S. HOLMES, Acting.

PROJECTS.**Kentucky—**

Study of forest conditions in cooperation with the State—WESLEY BRADFELD, J. S. HOLMES, and R. G. POND, Pikeville.

Montana—

Study of forest conditions in cooperation with the Northern Pacific Railroad Company—KARL WOODWARD, in charge, Kalispell, Mont.; assistants, S. L. MOORE, J. ST. J. BENEDICT, L. S. MURPHY, W. B. PIPER, R. M. MACMURRAY, F. TOMPKINS, W. S. UHLER, and G. E. SAWYER, Kalispell.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Mexico—

Supervision of cutting, Fort Wingate Military Reservation, in cooperation with the War Department—NELSON LE GRAND, Guam, N. Mex.

Wisconsin—

Working plans for timber sales on Indian reservations, in cooperation with the State and U. S. Indian Office—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, jr., Odanah.

Forest Atlas, F. G. PLUMMER, Point Louma, Cal.

Assignments for the instruction of rangers in surveying and mapping under the direction of supervisors: D. C. HARRISON, Topographer, Kalispell, Mont.; C. C. BASSETT, Topographer, Delta, Colo.

OFFICE OF SILVICS.

RAPHAEL ZON, Chief.

Field Studies, RAPHAEL ZON.

PROJECTS.**Colorado—**

Location and estimate of timber infested by the Black Hills beetle, the Engelmann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins, in charge)—W. D. EDMONSTON, care Ernest Shaw, Durango, Colo.

Ecological studies of the Colorado forests, with special reference to their life history and their reproduction after cutting or burning—Prof. FREDERIC E. CLEMENTS, University of Minnesota, Minneapolis.

Eastern States—

Study of the hickories—A. T. BOISEN, 307 E. Second street, Bloomington, Ind.; assistant, C. G. BATES, General Delivery, Cairo, Ill.

Montana—

Study of cut-over areas of lodgepole pine—E. R. HODSON, Saratoga, Wyo.

Northeastern States—

Study of the birches—S. T. DANA, 395 Spring street, Portland, Me.

New England—

Study of the white pine disease, its extent, amount of damage caused, and practical measures for preventing its spread, in cooperation with the Division of Forest Pathology—S. T. DANA, 395 Spring street, Portland, Me.

Rocky Mountain States—

Study of Engelmann spruce, with special reference to its growth, volume, and reproduction—J. H. FOSTER, Leadville, Colo.

Study of Douglas fir, with special reference to its growth, volume, and reproduction—E. H. FROTHINGHAM, Durango, Colo.

Library, H. E. STOCKBRIDGE.

Compilation, E. R. HODSON.

OFFICE OF EXTENSION.

SAMUEL N. SPRING, Chief.

Planting, L. C. MILLER (in the Field).

J. F. KÜMMEL, Acting.

Assignments for work in seed collecting under direction of supervisors: A. E. OMAN, Forest Assistant, Wallace, Idaho; W. H. MAST, Forest Assistant, Boise, Idaho; G. B. McDONALD, Forest Agent, Saratoga, Wyo.

Reconnaissance, W. H. VON BAYER.

PROJECTS.**Colorado—**

Study of watersheds in the Las Animas National Forest—C. A. KUPFER, La Veta.

Cooperation, A. S. PECK, Acting.

PROJECTS.

Examination of nurseries and experimental plantations in Iowa, North Dakota, and Nebraska, conducted in cooperation with State universities. Preparation of plans for cooperative planting in Colorado, South Dakota, and Texas in connection with dry land agriculture—A. S. PECK, Washington, D. C.

Hawaii—

Experimental planting—R. S. HOSMER, Collaborator, Honolulu.

Mississippi—

Experimental planting—G. L. CLOTHIER, Collaborator, Agricultural College.

Nebraska—

Experimental planting—F. J. PHILLIPS, Collaborator, Lincoln.

BRANCH OF GRAZING.

A. F. POTTER, Assistant Forester, in Charge (in the Field).

L. F. KNEIPP, Acting in Charge.

OFFICE OF CONTROL.

L. F. KNEIPP, Acting Chief.

Allotment, L. F. KNEIPP.

Adjustment, JOHN D. LELAND.

Permits, Miss ANNA P. KOSCHWITZ.

OFFICE OF DEVELOPMENT.

W. C. CLOS, Acting Chief.

Fences, C. H. ADAMS.

Forage, W. C. CLOS.

Water, J. K. CAMPBELL.

PROJECTS.**Oregon—**

Forage investigations, Imnaha National Forest. F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Wallowa, Oreg.; JAMES F. JARDINE, Ex-

pert, Wallowa, Oreg.; ARTHUR T. SAMPSON, Expert, Wallowa, Oreg.; G. A. PEARSON, Forest Assistant, Wallowa, Oreg.

Colorado—

Poisonous plant investigations. Prof. C. D. MARSH, Expert, Bureau of Plant Industry, in charge, Hugo, Colo.; IVAR TIDESTROM, Scientific Assistant, Hugo, Colo.

BRANCH OF PRODUCTS.

WM. L. HALL, Assistant Forester, in Charge.

OFFICE OF WOOD UTILIZATION.

R. S. KELLOGG, Chief.

Computing, E. A. ZIEGLER.

Drafting, C. A. KOLB.

Wood Chemistry, H. S. BRISTOL.

Wood Uses, M. CLINE.

PROJECTS.

California—

Tests of the strength of eucalyptus, redwood, and tanbark oak, in cooperation with the University of California and the Northwestern Redwood Company—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Study of the uses of western hardwoods—H. S. SACKETT, Berkeley.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistant, CORNELIUS BARRY.

Leaching studies—D. C. PARMELEE, Yale Station, New Haven.

Florida—

Turpentine orcharding experiments—P. D. EDMUNDS, Walkill.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN and J. O. BIXBY.

Oregon—

Tests of the strength of Douglas fir, in cooperation with the University of Oregon—J. B. KNAPP, Eugene; assistant, G. R. GESSERT.

Study of the uses of National Forest woods—H. B. HOLROYD, Portland.

Utah—

Study of markets for forest products—H. M. HALE, Salt Lake City.

Washington—

Tests of western hemlock and National Forest woods, in cooperation with the University of Washington—O. P. M. GOSS, University Station, Seattle.

General Studies—

Washington office, timber tests—H. S. BETTS, in charge; assistants, T. W. VENEMANN, ROLF THELEN, and H. E. MCKENZIE.

Collection of statistics of forest products, in cooperation with the Bureau of the Census—W. B. BARROWS, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of furniture woods—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—L. F. HAWLEY, Washington, D. C.

Study of chemical problems in wood utilization—ERNEST BATEMAN, E. SUTERMEISTER, and F. T. SCANLON, Washington, D. C.; A. L. DEAN, 93 Broad street, Boston, Mass.

Studies in the heat conductivity of wood—FREDERICK DUNLAP, Washington, D. C.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief (in the Field).
W. F. SHERFESEE, Acting Chief.

PROJECTS.

Alabama—

Preservative treatment of fence posts and other farm timbers, in cooperation with the State Department of Agriculture and Industries—C. L. HILL, Maplesville.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Lillie, Los Angeles; assistants, O. T. SWAN and W. H. KEMPFER.

Louisiana—

Experiments to devise a system for treating the products of southern lumber mills, in cooperation with the Great Southern Lumber Company—H. F. WEISS, Bogalusa.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Wisconsin—

The laying of an experimental track with hemlock and tamarack cross-ties to test the value of seasoning and treating, and of various devices for reducing the mechanical wear of the rails; in cooperation with the Chicago and Northwestern Railway Company—H. A. PAUL, New Ludington Hotel, Escanaba, Mich.

General Studies—

Correlation of data on the preservative treatment of American and foreign woods—M. C. JENSEN, Washington, D. C.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief.

Articles, T. CLEVELAND, Jr.

Printing, QUINCY R. CRAFT.

Review, FINDLEY BURNS.

Distribution, BRISTOW ADAMS.

PUBLICATIONS IN SEPTEMBER.

Circular 59 (Revised). Eucalypts.

Circular 109. Forest Planting in the North Platte and South Platte Valleys.

Circular 113. Use of Dead Timber on the National Forests.

Circular 116. The Waning Hardwood Supply.

Silvical Leaflet 1. Alpine Fir.

Silvical Leaflet 2. Port Orford Cedar.

Silvical Leaflet 12. Yellow Cedar.

BRANCH OF OPERATION.

JAMES B. ADAMS, Assistant Forester, in Charge.
GEO. G. ANDERSON, Assistant in Office Methods.

OFFICE OF ACCOUNTS.

GEORGE E. KING, Fiscal Agent and Chief.

Disbursing, E. A. MELZAR.
 Bookkeeping, O. H. TIBBOTT.

Appointments, Miss FLORENCE D. STRAUSE.
 Receipts, Miss MARY R. LATIMER.

OFFICE OF MAINTENANCE.**HERMON C. METCALF, Chief.****Purchase, H. C. TOWERS.**
Record, H. C. METCALF.**Supplies, A. M. SMITH.**
Photography, A. G. VARELA.**OFFICE OF LANDS.****GEORGE F. POLLOCK, Chief.****Special Uses, M. J. McVEAN (in the**
Field).**C. H. SQUIRE, Acting.****Claims, F. L. HARVEY.****Settlement, W. J. MANGAN.****Status, J. B. SATTERLEE.****Boundaries, A. C. RINGLAND (in the**
Field).**H. O. STABLER, Acting.****OFFICE OF ENGINEERING.****W. E. HERRING, Chief (in the Field).****A. T. MITCHELSON, Acting Chief.****OFFICE OF ORGANIZATION.****CHAS. S. CHAPMAN, Chief (in the Field).****CLYDE LEAVITT, Acting Chief.****DORR SKEELS, Forest Assistant, District 1.****HARRY H. FRENCH, Forest Supervisor, District 2.****ROSS McMILLAN, Forest Supervisor, District 3.****HOMER E. FENN, Forest Supervisor, District 4.****WILLIS M. SLOSSON, Forest Supervisor, District 5.****G. B. COLEMAN, Forest Supervisor, District 6.****NATIONAL FORESTS.**

(Numerals following National Forests indicate Inspection Districts.)

ALASKA.**Alexander Archipelago—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)****Afognak—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)****Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)****Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)****ARIZONA.****Baboquivari—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)****Black Mesa (N.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest**
Assistant; WILLARD M. DRAKE, Forest Assistant. (3)**Black Mesa (S.)—DRAYTON C. MARTIN, Acting Forest Supervisor, Clifton. (3)****Chiricahua—C. T. MCGLONE, Forest Supervisor, Douglas; H. D. BURRALL, Forest**
Assistant. (3)**Dragoon—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL,**
Forest Assistant.**Grand Canyon (N.)—SELDEN F. HARRIS, Forest Supervisor, Kanab, Utah; LORUM**
PRATT, Deputy Forest Supervisor. (4)**Grand Canyon (S.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON,**
Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)**Huachuca—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)****Mount Graham—H. A. E. MARSHALL, Forest Supervisor, Safford. (3)****Pinal Mountains—H. A. E. MARSHALL, Forest Supervisor, Safford. (3)****Prescott—F. C. W. POOLER, Forest Supervisor, Prescott. (3)****San Francisco Mountains—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON**
and WILLARD M. DRAKE, Forest Assistants. (3)**Santa Catalina—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D.**
BURRALL, Forest Assistant. (3)**Santa Rita—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL,**
Forest Assistant. (3)**Tonto—W. H. REED, Forest Supervisor, Roosevelt. (3)****Tumacacori—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)**

CALIFORNIA.

- Diamond Mountain**—L. A. BARRETT, Forest Supervisor, Quincy. (5)
Inyo—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Klamath—R. L. P. BIGELOW, Forest Supervisor, Yreka. (5)
Lassen Peak—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor. (5)
Modoc—C. E. RACHFORD, Acting Supervisor, Alturas. (5)
Monterey—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Pinnacles—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Plumas—L. A. BARRETT, Forest Supervisor, Quincy. (5)
San Bernardino—R. H. CHARLTON, Forest Supervisor, Los Angeles. (5)
San Gabriel—R. H. CHARLTON, Forest Supervisor, Los Angeles; Pasadena Planting Station—E. C. CLIFFORD, Pasadena. (5)
San Jacinto—J. R. BELL, Forest Supervisor, Hemet. (5)
San Luis Obispo—E. S. MAINWARING, Forest Supervisor, San Luis Obispo. (5)
Santa Barbara—STEPHEN H. DOUGLAS, Acting Forest Supervisor, Santa Barbara; H. G. Merrill, Forest Assistant; San Marcos Planting Station—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara. (5)
Shasta—G. A. COLEMAN, Forest Supervisor, Sisson. (5)
Sierra (N.)—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS, JOHN MURDOCH, Jr., and N. F. MACDUFF, Forest Assistants. (5)
Sierra (S.)—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, F. B. KELLOGG, D. N. ROGERS, and C. M. GRANGER, Forest Assistants. (5)
Sierra (E.)—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Stanislaus—S. L. N. ELLIS, Forest Supervisor, Sonora. (5)
Stony Creek—ERNEST BRITTEN, Acting Forest Supervisor, Elk Creek. (5)
Tahoe—MADISON B. ELLIOTT, Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant. (5)
Trabuco Canyon—J. R. BELL, Forest Supervisor, Hemet. (5)
Trinity—F. H. HAFLEY, Forest Supervisor, Weaverville. (5)
Warner Mountains—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)

COLORADO.

- Battlement Mesa**—DAVID ANDERSON, Forest Supervisor, Collbran. (2)
Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache. (2)
Fruita—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison; E. C. BERKY, Deputy Forest Supervisor. (2)
Holy Cross—JOHN McLAREN, Acting Forest Supervisor, Glenwood Springs; SWIFT BERRY, Forest Assistant. (2)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab, Utah. (2)
Las Animas—D. E. FITTON, Acting Forest Supervisor, La Veta. (2)
Leadville—A. L. STROUP, Forest Supervisor, Leadville; J. H. RAMSKILL, Forest Assistant. (2)
Medicine Bow (Colo. Div.)—HERBERT N. WHEELER, Forest Supervisor, Estes Park. (2)
Montezuma—ERNEST W. SHAW, Acting Forest Supervisor, Durango. (2)
Ouray—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
Park Range—THOMAS HOGAN, Forest Supervisor, Steamboat Springs. (2)
Pikes Peak—THOS. H. SHERRARD, Forest Supervisor, Denver; W. J. MORRILL, Forest Assistant. (2)
San Isabel—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
San Juan—F. C. SPENCER, Forest Supervisor, Monte Vista; A. A. PARKER, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant. (2)
Uncompahgre—FRANK A. BLAIR, Acting Forest Supervisor, Delta. (2)
Wet Mountains—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
White River—JAMES A. BLAIR, Forest Supervisor, Meeker. (2)

IDAHO.

- Bear River**—W. W. CLARK, Forest Supervisor, Logan, Utah; J. F. SQUIRES, Deputy Forest Supervisor. (4)
Big Hole (S.)—J. B. SEELY, Forest Supervisor, Sheridan, Mont. (1)
Bitter Root—F. A. FENN, Forest Supervisor, Kooskia. (1)
Cabinet (N.)—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
Caribou—J. T. WEDEMEYER, Forest Supervisor, Idaho Falls. (4)
Cassia—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)

- Coeur d'Alene**—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; ROY HEADLEY, J. E. BARTON, Deputy Forest Supervisors. (1)
- Henrys Lake**—FOSTER STEELE, Acting Forest Supervisor, St. Anthony; J. F. BRUNS, Forest Assistant. (4)
- Kootenai**—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
- Lemhi (N.)**—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
- Lemhi (S.)**—GUY B. MAINS, Forest Supervisor, Mackay. (4)
- Palouse**—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace. (1)
- Payette**—EMIL GRANDJEAN, Forest Supervisor, Boise; C. E. DUNSTON and O. M. BUTLER, Forest Assistants. (4)
- Pocatello**—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
- Port Neuf**—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
- Priest River**—R. L. FROMME, Acting Forest Supervisor, Newport, Wash. (1)
- Raft River**—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
- Salmon River**—GEORGE G. BENTZ, Acting Forest Supervisor, Salmon City. (4)
- Sawtooth**—EMIL GRANDJEAN, Forest Supervisor, Boise; C. E. DUNSTON and O. M. BUTLER, Forest Assistants. (4)
- Weiser**—JOHN B. LAFFERTY, Forest Supervisor, Weiser; WALTER M. CAMPBELL, Deputy Forest Supervisor; C. G. SMITH, Forest Assistant. (4)
- Yellowstone (Idaho Div.)**—FOSTER STEELE, Acting Forest Supervisor, St. Anthony; J. F. BRUNS, Forest Assistant. (4)

KANSAS.

- Garden City**—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr. (2)

MINNESOTA.

- Minnesota**—G. E. MARSHALL, Forest Supervisor, Cass Lake. (2)

MONTANA.

- Big Belt**—R. W. STUART, Forest Supervisor, Townsend. (1)
- Big Hole (Anaconda Div.)**—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
- Big Hole (N.)**—C. K. WYMAN, Acting Forest Supervisor, Dillon; ROBT. J. MOORE, Deputy Forest Supervisor. (1)
- Big Hole (S.)**—J. B. SEELY, Forest Supervisor, Sheridan.
- Bitter Root (Montana Div.)**—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
- Cabinet (N.)**—D. G. KINNEY, Forest Supervisor, Libby. (1)
- Cabinet (S.)**—F. A. SILCOX, Acting Forest Supervisor, Thompson Falls. (1)
- Crazy Mountains**—E. C. RUSSELL, Forest Supervisor, Livingston. (1)
- Ekalaka**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
- Elkhorn**—R. W. STUART, Forest Supervisor, Townsend. (1)
- Gallatin**—DAVID CONKLING, Forest Supervisor, Bozeman. (1)
- Helena**—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant. (1)
- Hell Gate (E.)**—CHARLES C. HALL, Acting Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
- Hell Gate (W.)**—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
- Highwood Mountains**—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
- Kootenai**—D. G. KINNEY, Forest Supervisor, Libby. (1)
- Lewis and Clark (N.)**—F. N. HAINES, Forest Supervisor, Kalispell. (1)
- Lewis and Clark (S.)**—PAGE S. BUNKER, Forest Supervisor, Kalispell. (1)
- Little Belt**—IRA E. TODD, Forest Supervisor, Neihart. (1)
- Little Rockies**—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
- Lolo**—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
- Long Pine**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
- Madison**—J. B. SEELY, Forest Supervisor, Sheridan. (1)
- Missoula**—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
- Otter**—A. C. MCCAIN, Acting Forest Supervisor, Miles City. (1)
- Pryor Mountains**—H. W. THURSTON, Forest Supervisor, Cody, Wyo. (1)
- Snowy Mountains**—IRA E. TODD, Forest Supervisor, Neihart. (1)
- Yellowstone (Absaroka Div.)**—E. C. RUSSELL, Forest Supervisor, Livingston. (1)

NEBRASKA.

- Dismal River**—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. Halsey Planting Station—LA MOREE BESLEY, Halsey. (2)
Niobrara—C. A. SCOTT, Forest Supervisor, Halsey; H. R. SHOCKLEY, Deputy Forest Supervisor. (2)
North Platte—C. A. SCOTT, Forest Supervisor, Halsey. (2)

NEVADA.

- Charleston**—HARRY E. MATTHEWS, Acting Forest Supervisor, Las Vegas. (4)
Independence—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Monitor—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)
Ruby Mountains—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Tahoe—M. B. ELLIOTT, Forest Supervisor, Nevada City, Cal. (5)
Toiyabe—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)
Toquima—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)

NEW MEXICO.

- Big Burros**—R. C. McCURE, Forest Supervisor, Silver City; DOUGLAS RODMAN, Forest Assistant. (3)
Gallinas—J. H. KINNEY, Acting Forest Supervisor, Capitan. (3)
Gila (N.)—JOHN KERR, Forest Supervisor, Magdalena. (3)
Gila (S.)—R. C. McCURE, Forest Supervisor, Silver City; W. H. GODDARD, Deputy Forest Supervisor; DOUGLAS RODMAN and R. F. BALTHIS, Forest Assistants. Fort Bayard Planting Station—W. B. HADLEY, Forest Assistant, Fort Bayard. (3)
Guadalupe—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JAMES, Forest Assistant. (3)
Jemez—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. (3)
Lincoln—J. H. KINNEY, Acting Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Fort Stanton. (3)
Magdalena—JOHN KERR, Forest Supervisor, Magdalena. (3)
Manzano—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Mount Taylor—HUGH H. HARRIS, Acting Forest Supervisor, Albuquerque. (3)
Pecos River—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe; A. D. READ, Forest Assistant. Las Gallinas Planting Station—S. Y. PARNAY, East Las Vegas. (3)
Peloncillo—C. T. MCGLONE, Forest Supervisor, Douglas, Ariz. (3)
Sacramento—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JAMES, Forest Assistant. (3)
San Mateo—JOHN KERR, Forest Supervisor, Magdalena. (3)
Taos—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe. (3)

OKLAHOMA.

- Wichita**—W. R. MATTOON, Acting Forest Supervisor, Cache. (3)

OREGON.

- Ashland**—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Blue Mountains (E.)—HENRY IRELAND, Acting Forest Supervisor, Sumpter. (6)
Blue Mountains (W.)—A. S. IRELAND, Forest Supervisor, Prineville; CY. J. BINGHAM, Deputy Forest Supervisor. (6)
Bull Run—R. B. WILSON, Forest Supervisor, Portland; A. E. CONHOON, Deputy Forest Supervisor. (6)
Cascade (N.)—R. B. WILSON, Forest Supervisor, Portland; A. E. CONHOON, Deputy Forest Supervisor. (6)
Cascade (S.)—S. C. BARTRUM, Forest Supervisor, Roseburg. (6)
Coquille—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
Goose Lake—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
Heppner—THOMAS E. CHIDSEY, Acting Forest Supervisor, Heppner. (6)

Imnaha—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa; HARVEY W. HARRIS, Deputy Forest Supervisor. (6)
Siskiyou—M. J. ANDERSON, Acting Forest Supervisor, Grants Pass. (6)
Tillamook—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Umpqua—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash. (6)

SOUTH DAKOTA.

Black Hills—J. F. SMITH, Forest Supervisor, Deadwood; H. J. BROWN, Forest Assistant. (2)
Cave Hills—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Short Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Slim Buttes—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)

UTAH.

Aquarius—GEORGE H. BARNEY, Forest Supervisor, Escalante. (4)
Bear River—W. W. CLARK, Forest Supervisor, Logan; J. F. SQUIRES, Deputy Supervisor. (4)
Beaver—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Dixie—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George. (4)
Fillmore—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Fish Lake—N. E. SNELL, Forest Supervisor, Salina. (4)
Glenwood—N. E. SNELL, Forest Supervisor, Salina. (4)
Grantsville—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Manti—A. W. JENSEN, Forest Supervisor, Ephraim. (4)
Monticello—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Payson—WALTER F. BROUGH, Acting Forest Supervisor, Payson. (4)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello, Idaho. (4)
Salt Lake—E. H. CLARKE, Forest Supervisor, Salt Lake City; Wasatch Planting Station—N. J. FETHEROLF. (4)
Sevier—TIMOTHY C. HOYT, Forest Supervisor, Panguitch. (4)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo; D. S. MARSHALL, Deputy Forest Supervisor; WM. M. ANDERSON, Deputy Forest Supervisor. (4)
Vernon—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
Wasatch—E. H. CLARKE, Forest Supervisor, Salt Lake City. (4)

WASHINGTON.

Colville—W. W. CRYDER, Acting Forest Supervisor, Republic. (6)
Olympic—FRED HANSON, Forest Supervisor, Hoodspport. (6)
Priest River—R. L. FROMME, Acting Forest Supervisor, Newport. (1)
Rainier—G. F. ALLEN, Forest Supervisor, Orting. (6)
Washington (E.)—G. W. MILHAM, Forest Supervisor, Chelan. (6)
Washington (W.)—CHAS. W. ARMSTRONG, Acting Forest Supervisor, Sumas; B. P. KIRKLAND, Forest Assistant. (6)
Washington (Yakima Div.)—D. B. SHELLER, Forest Supervisor, Wenatchee. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla. (6)

WYOMING.

Bear Lodge—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak. (2)
Big Horn—W. E. JACKSON, Forest Supervisor, Big Horn. (1)
Black Hills—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.; H. J. BROWN, Forest Assistant. (2)
Caribou—J. T. WEDEMEYER, Forest Supervisor, Idaho Falls, Idaho. (4)
Crow Creek—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
Medicine Bow (Wyo. Div.)—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
Sierra Madre—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)

Uinta—WILLARD I. PACK, Forest Supervisor, Provo, Utah; D. S. MARSHALL, WM. M. ANDERSON, Deputy Forest Supervisors. (4)
Yellowstone (Shoshone Div.)—H. W. THURSTON, Forest Supervisor, Cody; C. N. WHITNEY, Forest Assistant. (1)
Yellowstone (Teton Div.)—ROBT. E. MILLER, Forest Supervisor, Jackson. (4)
Yellowstone (Wind River Div.)—ZEPH JONES, Forest Supervisor, Pinedale. (4)

SERVICE CHANGES IN SEPTEMBER.

APPOINTED.

Products—

WOOD UTILIZATION.—E. Sutermeister, Expert; F. T. Scanlon, Laboratory Assistant; Chas. J. Raff, Laboratory Assistant and Engineer.

Silviculture—

MANAGEMENT.—Lincoln Crowell, Forest Assistant.

EXTENSION.—Geo. L. Clothier, Collaborator; G. B. McDonald, Forest Agent.

Operation—

ENGINEERING.—Frederick W. Cater, Constructing Engineer; Edwin W. Kramer, Constructing Engineer; F. E. Wales, R. E. Mesnard, A. L. Herring, and Nils Hughil, Civil Engineers; Wm. N. Hall, Surveyor and Draftsman,

LANDS.—Chas. G. Sullivan, Expert Miner.

ORGANIZATION.—Jas. M. L. Moore, Forest Agent.

RESTORED TO THE ROLLS WITH PAY.

Forester—

APPALACHIAN STUDY.—A. K. Chittenden, Inspector.

Products—

PUBLICATION.—Enos A. Mills, Forest Agent.

PROMOTED.

Grazing—

Ivar Tidestrom, Scientific Assistant; J. K. Campbell, Inspector of Grazing.

SERVICE NOTES FOR OCTOBER.

These notes contain instructions and necessary information for Forest officers, and will therefore be carefully read and kept on file for reference.

OFFICE OF THE FORESTER.

INSPECTION.

Attention is called to the following changes in the "Instructions to Inspectors," which was issued under date of June 5, 1907:

SECTION VI. *Uses*, Paragraph 1, should read as follows: "A discussion of each case of occupancy or right of way, whether granted by statute, by the Department of the Interior, or by the Forest Service. From this sawmills are excepted. They should be discussed under Section I—Timber Sales, as Paragraph 6. Permits for pastures and wild hay are also omitted from this section. They should be discussed under Section IV—Grazing, as Paragraph 5 (a)."

The language of the instructions, as originally issued concerning sawmills and rights of way, is obscure. The words "except sawmills" should have been put in parentheses in the original order. The reason they are excepted under *Uses* is that sawmill permits are handled by the Office of Management. There was no intention to except rights of way of any sort, no matter by whom granted or permitted. Thus, rights of way for wagon roads built before the Forest was created are granted by statute without any filing in or approval by the Department of the Interior; rights of way for railroads must be mapped and approved by the Department of the Interior; rights of way for power plants must be permitted by the Forest Service. The first two are permanent, and the third is terminable at the discretion of the Forester, but all three should be reported upon by Inspectors.

The exception of permits for pastures and wild hay is due to a recent change by which these matters are handled in the Office of Grazing.

LAW.

Withdrawal for Necessary Use before Listing under Act of June 11, 1906—

Examiners of lands applied for under the act of June 11, 1906, are reminded that rights for logging roads and other uses necessary for the efficient administration of the Forests may be withdrawn from all forms of entry in the same manner as administrative sites are withdrawn. The withdrawal would not cover the entire fee, but merely an easement to occupy the land for a road or other specific administrative use, leaving the fee open to appropriation. After the withdrawal the land over which the right of way passes may be listed under the act of June 11 as one contiguous tract. It is essential that the withdrawal should precede the listing. The examining officer should give the course and distance of the road with accuracy and furnish with his recommendation for withdrawal a correct plat and field notes.

An important case has recently arisen upon the Toquima National Forest involving the right of the Forester to sell timber upon an invalid mining claim. Guard Van Austin sold to Mr. Nanani 10 acres of dead wood from ground covered by a mining location. When the purchaser removed the wood, he was

arrested on the complaint of the claimant and charged with malicious mischief. The charge was changed to petit larceny. The claimant and his attorneys admitted that no discovery had been made, but asserted nevertheless a right to the exclusive use of the surface. The Department of Justice instructed the United States attorney for Nevada, by wire, to defend Mr. Nanani and secure his release by writ of habeas corpus from the Federal court if necessary. An intent to steal must be proved to maintain a prosecution for larceny. It is an established principle of law that the taking of property under a claim of right is not larceny; therefore, every timber purchaser from the Forest Service would be secure against criminal prosecution, even if the claim from which the timber is sold were valid. It is expected that the criminal case against Mr. Nanani will be decided in his favor on this ground without a decision upon the necessity of discovery as the foundation of a valid mining claim. The Statute (Rev. Stat., Sec. 2320) provides expressly "but no location of a mining claim shall be made until discovery of the vein or lode within the limits of the claim located." The United States Attorney will probably make arrangements for a civil suit to test this question if the claimant will admit in such a suit that there has been in fact no discovery upon his claim.

It is the policy of the Department to protect purchasers and permittees of the Forest Service to the fullest extent and to request the assistance necessary from the Department of Justice for that purpose.

AUGUST 31, 1907.

The FORESTER, *Forest Service, Washington, D. C.*

SIR: My attention has been called to a letter, dated July 23, to Mr. G. S. Arnold, Acting Law Officer of the Forest Service, from Mr. George V. Alexander, of Republic, Wash., representing himself to be attorney for Ernest W. Grant, in a case of timber trespass on the Colville National Forest, reported June 6, 1907. The letter is scurrilous and abusive. You are therefore instructed to receive no communications from Mr. Alexander as attorney or agent in any matter, and to transact no business with him as such attorney or agent until you are otherwise instructed.

Please notify Mr. Alexander, Mr. Grant, and the proper officers of the Forest Service of this action.

I have the honor to be, sir, very respectfully, your obedient servant,

JAMES WILSON, *Secretary.*

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Application for Advance Cutting—

The application form for advance cutting which appeared on page 20 of the August Field Program has not been printed and will not be furnished on requisition. Whenever it is necessary to apply for advance cutting the form must in each case be typewritten in the supervisor's office. This is necessary in order to emphasize the fact that definite reasons must accompany each application for advance cutting.

Equivalent of Board Feet—

All Forest officers in charge of Forests who have been authorized to make Class B sales not to exceed a maximum of so many thousand feet B. M. should interpret this to include material that is not measured by the board foot, such as mining timbers, ties, shingle bolts, etc., to an amount approximately equivalent to the specified number of feet B. M.

It has been shown by check scaling that too often all logs in the skidway are not scaled. In one instance 20 were missed out of 136. Work of this kind will not be tolerated and supervisors will be held strictly responsible. In all

sales where scalers are not regularly employed and where purchasers are required to mark the log lengths on the small end it is imperative that the Forest officer check up the number of logs in the skidway after scaling and see that none have been missed.

Cardboard Rules for Mapping—

A supply of cardboard rules designed with reference to the Atlas Standard is being sent out to all supervisors. It will be noticed that the scale on these rules shows on one edge feet and on the other edge miles and chains. It is believed that the new celluloid rule of this pattern will be of great assistance in mapping on the National Forests.

Notice of Sale—

In every Class C sale which has been acted on during the past month an extra copy of the notice of sale has been sent to the supervisor for his files. This has been done to enable the supervisor to compare the printed notice with the notice as sent from the Washington office, so that any mistakes which have been made may be promptly discovered. If mistakes are found, they should be corrected before the next issue of the paper, and the last date for receiving bids should be made one week later. Forest officers should make every effort to obtain a copy of the first issue of the paper containing the advertisement, so that this can be done. This is very important, since the timber must be properly advertised before it can be sold.

Bid Envelope, Letters of Transmittal, and Deposits—

In a number of recent sales the bids received at the Washington office were not inclosed in the formal envelope provided for this purpose and were not designated in accordance with the instructions in the notice of sale. Frequently the deposit required by the notice to be sent to the Fiscal Agent when the bid is submitted to the Forester is inclosed in the same envelope with the bid and without a formal letter of transmittal. To avoid mistakes of this kind it is of the utmost importance that the Forest officer furnish each prospective purchaser with a prepared bid envelope and a formal letter of transmittal and instruct him that the deposit should not be inclosed with the bid. Bidders should also be told that their bids should be submitted promptly in order that they may be received in Washington before the time fixed by the notice of sale as the last day for receiving bids. Letters of transmittal which are prepared for prospective bidders other than the applicant should not contain in the designation the name of the original applicant, but should give only the date of the application and the name of the Forest.

Verbal Agreements—

Forest officers should not in any case change by verbal agreement the terms of sales as set forth in the agreements. This is very important for two reasons: First, if the change is made without the consent of the approving officer, it is of no effect and therefore gives the purchaser just ground for dissatisfaction and complaint; and, second, where a bond has been given, any change of this kind made without the written consent of the sureties releases them from their obligation. The following clause is now being inserted in all timber-sale agreements:

“The terms of the sale are completely set forth in this agreement and can not be varied or modified except with the written consent of the Forester. No Forest officer has or will be given authority for this purpose.”

OFFICE OF SILVICS.

New Forest Literature—Compiled by the Librarian.

The publications announced in this list consist of those on file in the Service library.

Forestry—General—

Progress of forestry in 1906; Q. R. Craft. 1907. 13 p. Illus. From Yearbook of the U. S. Dept. of agriculture, 1906.

Forest Botany—

Nos arbres (Our trees); H. Correvo. 1906. 305 p. Illus. Libr. Horticole, Paris.
The trees of Great Britain and Ireland; H. J. Elwes and A. Henry. Vol. 2, 1907. 250 p. Illus. Privately printed, Edinburgh.

Silvics—

Die Bedeutung klimatischer Varietäten unserer Holzarten für den Waldbau (The importance in silviculture of changes in the characteristics of trees due to climate); A. Cieslar. 1907. 32 p. W. Frick, Wien.
Die Streuversuche im grossen Föhrenwalde (Experiments with forest litter in large pine forests); K. Böhmerle. 1906. 22 p. W. Frick, Wien.
White oak in the southern Appalachians; W. B. Greeley and W. W. Ashe. 1907. 27 p. Circular 105 of the Forest service.

Rainfall—

Wald und Niederschlag in Westpreussen und Posen und die Beeinflussung der Regen- und Schneemessung durch den Wind (Forests and rainfall in West Prussia and Posen, and the influence of wind on rain and snow measurements); J. Schubert. 1906. 8 p. From Zeitschrift für Forst- und Jagdwesen, 1906, no. 11.

Stream flow—

Compte-rendu sommaire du 1-er Congrès international de l'aménagement des montagnes, Bordeaux, 19-20 Juillet 1907 (Report of the 1st international congress for the consideration of the management of the mountains, Bordeaux, July 19-20, 1907). 22 p. Impr. A. Saugnac, Bordeaux.
La défense des montagnes (The protection of the mountains); P. Descombes. 1907. 24 p. Bureau de la Revue des deux mondes, Paris.
Les portes maritimes et l'aménagement des montagnes (Seaports and the management of the mountains); P. Descombes. 2 p. Association pour l'aménagement des montagnes, Bordeaux.
Relation of soils and forest cover to quality and quantity of surface water in the Potomac basin; W. W. Ashe. 1907. 37 p. In Water supply and irrigation paper no. 192, U. S. Geological survey.

Forest Management—**Working Plans—**

Umtrieb, Durchforstung und Reinertrag (Rotation, thinning and net yield); J. Schubert. 1907. 14 p. From Zeitschrift für Forst und Jagdwesen, 1907, no. 1.

Planting—

How and when to collect white pine seed; F. W. Rane. 1907. 16 p. Illus. State forester's office, Boston.

Organization and Administration—

Brief instructions to Massachusetts forest wardens; F. W. Rane. 1907. 12 p. State forester's office, Boston.
Cape of Good Hope—Forest department. Report of the chief conservator of forests, 1906. 1907. 32 p. Illus. Cape Town.
Field program for September, 1907; Forest service. 24 p.
Minnesota—Forestry commissioner. 12th annual report for 1906. 1907. 149 p. Illus. St. Paul, Minn.

National and State Forests—

National forests and the lumber supply; T. H. Sherrard. 1907. 6 p. From Yearbook of the U. S. Dept. of agriculture, 1906.
The use book; regulations and instructions for the use of the national forests; Forest service. 1907. 248 p.

Utilization—

Chemical methods for utilizing wood; F. P. Veitch. 1907. 47 p. Illus. Circular 36 of the Bureau of chemistry, U. S. Dept. of agriculture.
Consolidation des attaches des rails (The fastening of rails to ties); E. Sauvage. 1902. 16 p. Illus. P. Renouard, Paris.
Note sur la consolidation des attaches dans les traverses de chemins de fer au moyen de trénaux (The fastening of rails to ties by means of screw-dowels); M. Cartault. 1900. 5 p. Illus. C. Dunod, Paris.
The principal timbers of New South Wales and their uses; R. D. Hay. 1906. 25 p. Illus. New South Wales—Dept. of lands—Forestry branch, Sydney.

Technology—

- The strength of wood as influenced by moisture; H. D. Tiemann. 1907. 42 p. Circular 108 of the Forest service.
- Ueber Verteilung der Druckkräfte in verschieden geformten Holzscheiben von *Quercus salicina* (The distribution of pressure in differently shaped discs of *Quercus salicina*). Ueber Klemmen japanischer Hölzer (The strength of Japanese woods); F. Koide. 1907. 71 p. Bulletin 1 of the Imperial college of agriculture and forestry, Morioka, Japan.

Statistics—

- Exports and imports of forest products, 1906; R. S. Kellogg. 1907. 28 p. Circular 110 of the Forest service.

Forest Laws—

- Forest laws; F. W. Rane. 1907. 39 p. State forester's office, Boston.

Street and Park Trees—

- A new era in tree growing; J. Davey. 1907. 32 p. Illus. Published by the author, Kent, Ohio.

Irrigation—

- Irrigation and drainage laws of Italy; R. P. Teele. 1907. 100 p. Bulletin 192 of the Office of experiment stations, U. S. Dept. of agriculture.

Periodicals—Articles of General Interest—

- World Today, Aug. 1907.—Gifford Pinchot, Forester, by Forbes Lindsey.
- American magazine, Sept. 1907.—William T. Burns; a true detective romance, by Lincoln Steffins.
- Country life in America, Aug. 1907.—Saving the tremendous waste of forest fires, by B. E. Fernow, p. 414.
- Garden magazine, Oct. 1907.—Trees and shrubs for fall planting, by L. Barron, p. 127.
- National geographic magazine, Aug. 1907.—Saving the forests, by H. A. Smith, p. 519.
- Pacific monthly, Sept. 1907.—The way of the land transgressor: 2. Gifford Pinchot and the national forests, by L. Pease, p. 345.
- Philippine journal of science, May. 1907.—Philippine fibers and fibrous substances; their suitability for paper making, by G. F. Richmond, p. 81.
- Proceedings of American society of civil engineers, Aug. 1907.—Pavements; an informal discussion, by G. W. Tillson and others, p. 711.
- Scientific American supplement, June 8, 1907.—The varied uses of cypress, p. 26279.
- Scientific American supplement, June 15, 1907.—A novel lumbering crane, by H. Hale, p. 26292.
- Scientific American supplement, Aug. 3, 1907.—The preservation of timber; some new data on penetration, p. 71.
- Science, Aug. 16, 1907.—A blight disease of young conifers, by P. Spaulding, p. 220.
- Sierra club bulletin, June, 1907.—Forestry work in California, by G. B. Lull, p. 208.
- Sunset magazine, Aug. 1907.—Millions in trees; the forest wealth of the Pacific northwest, by E. P. Sheldon, p. 388.
- U. S. daily consular reports, Aug. 30, 1907.—Lumber in Ecuador, by H. R. Dietrich, p. 13.
- U. S. daily consular reports, Aug. 31, 1907.—Glass telegraph poles, by G. C. Kothe, p. 6.

Trade Journals—

- American lumberman, Aug. 17, 1907.—Specific information relative to the use of wood for street paving, p. 32.
- American lumberman, Aug. 31, 1907.—Forestry in practice, by H. S. Graves, p. 1: The proposed White Mt. national forest, p. 29.
- American lumberman, Sept. 7, 1907.—Rise and development of the veneer industry, p. 34; Modern methods for making veneer and fine lumber, p. 62.
- American lumberman, Sept. 14, 1907.—Economy in the handling of heavy timber, p. 41.
- Barrel and box, Aug. 1907.—Future of the gum stave, p. 42; The preservation of our forests, by I. F. Powell, p. 50.
- Dixie wood-worker, Aug. 1907.—How veneer is made, p. 13; Creosoted ties preserve forests, p. 14.
- Hardwood record, Sept. 10, 1907.—The teredo; life history and methods of prevention, p. 20.
- International cooperation news, Sept. 1, 1907.—Development of timber resources in Mexico, p. 12.
- Lumber review, Sept. 1, 1907.—Will concrete solve the railroad tie problem, p. 12.
- Lumber trade journal, Sept. 1, 1907.—Forestry in France, p. 13.
- Mississippi Valley lumberman, Aug. 16, 1907.—The advantages of sawing lath with a bandsaw, p. 34.
- Mississippi Valley lumberman, Aug. 30, 1907.—New law for taxing forests in New Hampshire, p. 22.
- New York lumber trade journal, Sept. 1, 1907.—Scientific forestry in Japanese possessions and Norway, p. 13.

Periodicals—Articles of General Interest—Continued.

Trade Journals—Continued.

- Packages, Aug., 1907.—Cost and profit in cigar boxes, p. 21.
 Packages, Sept. 1907.—Spruce and fir for tight cooperage, p. 21; The Appalachian—White Mt. national forests, p. 30; Timber census of the United States, by R. S. Kellogg, p. 32; The veneer box, p. 53.
 Pacific Coast wood and iron, Sept. 1907.—Extent and methods of veneer manufacture, p. 7.
 Pacific lumber trade journal, Aug. 1907.—Pacific woods for porch columns, p. 24; The lumber cut of the Pacific Coast, p. 33.
 Paper mill and wood pulp news, Aug. 31, 1907.—Proposed export duty on Canadian pulp logs, p. 2; Growth of the paper and pulp industry in Norway, p. 5.
 Railway age, Aug. 16, 1907.—A new preservative coating for wood, p. 240.
 Railway age, Aug. 30, 1907.—Specifications for creosoting Pacific Coast timber, p. 292.
 Railway and engineering review, Aug. 17, 1907.—French formula for fire-proofing wood, p. 729.
 Southern industrial and lumber review, Aug. 1907.—The cause of bird's-eye grain, p. 20; Mexican cedar, p. 47.
 Southern lumber journal, Aug. 15, 1907.—Steel and concrete ties, p. 27; Yellow pine industry, p. 35.
 Southern lumberman, Aug. 17, 1907.—The problem of red cedar supply, p. 21.
 Southern lumberman, Sept. 7, 1907.—Philippine woods for pencil stock, p. 20.
 Timber trades journal, Aug. 10, 1907.—The forests of Roumania and their output, p. 218.
 Timber trades journal, Aug. 17, 1907.—Re-afforestation as a solution of the rural employment problem in Ireland, p. 226; Figure in timber, p. 227.
 Timberman, Aug. 1907.—New method of quarter-sawing, p. 52.
 West Coast lumberman, Aug. 1907.—The future lumber supply, by R. L. McCormick, p. 823.
 West Virginia lumberman, Aug. 25, 1907.—Investigation of the forests of Kentucky, p. 19; Tree planting as an investment, p. 26.
 Wood-worker, Aug. 1907.—Talks on drying, p. 33.
 Wood craft, Sept. 1907.—Wooden stave pipe, p. 151.
 Woodworkers' review, Sept. 1907.—Making grain alcohol from sawdust, p. 241.

OFFICE OF EXTENSION.

Report on Ranger Nurseries—

Supervisors should give prompt attention to returning Form 991 to the Forester accompanied by answer to circular letter SE of September 17. It is exceedingly important to have a complete record in regard to this work, and if supervisors have the data already at hand for filling out Form 991 they should send in their reports at once.

BRANCH OF GRAZING.

Annual Reports—

The attention of supervisors is called to the importance of making their reports on grazing immediately at the close of the summer grazing period, in order that the Secretary of Agriculture may authorize grazing for the season of 1908, and that information regarding grazing allowances, periods, and fees may be given to the public at the earliest possible date. All reports should be mailed to the Forester not later than December 1.

It is desired that all supervisors include in their reports a recommendation regarding the protective (Class A) limit and the maximum limit mentioned in the general information under Regulation 40. The protective limit should be such a number of stock as small owners need to graze in connection with their ranches to insure the successful establishment of homes, and such a number as new settlers should be allowed a permit for. The maximum limit should be from 4 to 10 times as large as the protective limit, according to local conditions, and may be established with the understanding that persons now holding permits for more than the limit may be allowed renewal for the number of stock they are entitled to graze, but that no person, partnership, or corporation shall be allowed to increase their permit above the maximum limit in the future.

BRANCH OF OPERATION.

OFFICE OF MAINTENANCE.

Rangers' Carrying Cases—

There have been forwarded to each supervisor a sufficient number of canvas carrying cases to equip each ranger upon his Forest. The design and material of these cases were adopted after careful deliberation, and will prove of great value to rangers in their transaction of business in the field. Additional cases may be procured upon requisition to the Forester.

Addresses—

Some delay has occurred in the delivery of articles to Forest officers, whose headquarters are in large cities, because their local addresses were not known. This could be avoided if the name of the building or street number were inserted in the requisitions.

Small Badges Available—

Small badges are available for distribution, and supervisors desiring to exchange large badges for them should make requisition for the necessary number. When the badges are received the large ones should be returned to the property clerk.

OFFICE OF LANDS.

Special Uses—

Failure on the part of Forest officers to observe and follow the special-use instructions and requirements in The Use Book and in the Circular of Instructions issued July 19, is becoming serious. It is absolutely necessary that all Forest officers thoroughly familiarize themselves with such instructions and requirements. The following are the most serious mistakes:

Failure to make complete reports of Form 964 and to mail the reports to the Forester with the Forester's (original) copies of the permits.

Omission from many classes of permits, and particularly from pasture permits, of the essential stipulations and conditions prescribed by the Circular of July 19.

Failure to require witnesses to signatures of permittees, and to require evidences of the authority of officers who execute agreements for corporations, as prescribed on the back of Forms 946a and 946b.

The issuance of permits before the applicants make the required payments.

Failure to identify special-use transactions as required by The Use Book, p. 166.

Failure to comply with the first paragraph under the subject "Dams, Reservoirs, and Conduits," on page 8, Circular of July 19. The reports accompanying permits of this class should show that the Supervising Engineer of the Reclamation Service has approved.

Amendment of Special-use Circular of July 19.—The Circular of Instructions, Special Uses, issued July 19, is hereby amended by omitting the following clause from page 13:

No laborer or mechanic shall be employed more than eight hours in any calendar day upon the construction or other work under this permit.

All Forest officers will please so amend their copies of the Circular.

Boundaries—

The President, on September 10, signed a proclamation creating the Tongass National Forest in Alaska. The new Forest has an area of approximately 2,006,000 acres and is situated on the mainland, directly east of the southern end of the Alexander Archipelago National Forest.

Upon the recommendation of Supervisor Langille, an elimination has been made from the Chugach Forest. A strip 1 mile wide and about 30 miles long, extending along the shore of the Valdez Arm of Prince William Sound, was eliminated to avoid land difficulties incident to a railroad boom. The area is nearly all timberless and contains approximately 33,000 acres. The President signed this proclamation on September 18.

Administrative Sites.—Whenever any portion of a National Forest is transferred from one district to another, the officer who assumes charge of the transferred area should secure, from the officer previously in charge, a complete list of all tracts which have been withdrawn therein for administrative purposes, and should see to it that the withdrawals are properly made of record in his office.

The attention of Forest officers is also invited to the importance of not only making each case the subject of a separate communication (see instructions upon this point in The Use Book, p. 132), but also the necessity of treating each subject in a separate communication. For instance, the withdrawal of a tract and the matter of acquiring the improvements thereon are separate subjects, requiring separate communications in order to prevent confusion in the files and records.

Claims—

Surveys of Squatter Claims.—In many cases the Forest Service might assist bona fide settlers on unsurveyed lands by calling the attention of the General Land Office to the necessity of surveys. Forest officers should remember this and report such cases to the Forester, who will notify the Commissioner of the General Land Office.

Supplemental Reports on Claims.—Inspectors, under their general authority, may direct reexaminations and supplemental reports upon claims without referring the question to the Forester, and they should direct such action when in their judgment a report by a Forest officer on any claim is based on insufficient facts.

Improvements on Claims.—It is important that Forest officers, in reporting on claims, ascertain and give the exact date when the claimant first placed upon his claim such work and improvements as the law requires to evidence the claimant's good faith and prior right to the land. In many instances claimants attempt to make final proof who placed such improvements on the land long after the time limited by the law.

Describing Lands in Correspondence.—In describing lands in all correspondence Forest officers must say whether the township is north or south and whether the range is east or west. They must also name the meridian. In reporting upon claims Forest officers must name the land district in which the claim is located.

OFFICE OF ORGANIZATION.

Complaint has been made that in some cases game wardens and others are securing the Service uniform. No one except members of the Forest Service are authorized to wear this uniform. In order to avoid the securing of uniforms by unauthorized persons members of the Forest Service are requested, when making orders, to state their titles and, in case of local Forest officers, to submit orders through the supervisor.

The contract for furnishing the Service uniform is at present held by the Pettibone Brothers Manufacturing Company, Cincinnati, Ohio. This company states that the uniform made of the heavy weight or 22-ounce cloth will be furnished at a special price of \$10 for the coat and \$6.50 for the trousers or riding breeches. The company states that they are prepared to ship uniforms within ten days after the receipt of measurements. Arrangements have been made by the company by which measurements of men stationed at Washington will be made without extra charge by Mr. G. E. Hebbard, 709 Ninth street NW., Washington, D. C.

Civil Service Examination for Clerk—

On November 1 an examination will be held by the Civil Service Commission for the position of clerk in the Forest Service in the Western States and Territories. Printed circulars showing the character of the examination and the places at which it will be held will be issued within a very short time. A copy will be sent each supervisor by the Forester, and, in addition, the examination will be advertised in the usual way by circulars sent out by the Civil Service Commission. The examination will be held at all points in the National Forest States and Territories at which civil service examinations are usually held for any position. Stenography, typewriting, and examination along clerical lines will be included. Supervisors who now have clerks holding temporary appointments should, in case they desire to retain the services of these clerks permanently, see that they make proper application to the Civil Service Commission and take this examination. It is probable that a sufficient number will be certified to replace practically all the temporary clerks in supervisors' offices by those eligible for permanent appointment. Supervisors are urged to bring this matter to the attention of qualified persons desiring appointment to clerical positions in the Forest Service in the West.

Schedule of Charges on Form 99—

To insure a uniform distribution of expenses upon all National Forests the following schedule of charges should be observed in preparing Form 99. This is supplemental to all instructions on the back of Form 99 and is intended to cover items when doubt exists as to the proper charge:

Office signs to Headquarters.

Drayage, express, and freight to Heading against which articles transported are chargeable.

Stoves for ranger cabins and office stoves to Headquarters.

Expendable field equipment, such as files, ax handles, etc., to Administration expenses.

Flag poles and fixtures to Headquarters.

Tacks and nails for signs and notices to Administration expenses.

Tools and equipment purchased for permanent improvement work may be charged against the permanent improvement fund. Entry should be made on Form 99 under the heading for which they are used—that is, "Headquarters," "Telephone lines," etc.

Supervisors in charge of more than one Forest should show on Form A and Form 4 the Forest in connection with which each item of expense was incurred for which payment or reimbursement is asked. Observance of this request will greatly facilitate the auditing of accounts.

Full Use of Salary Allotments—

Supervisors should understand that they are entitled to make full use of their salary allotments. In case it is not possible at one time to secure men to complete the force allotted, additional men may later be recommended for appointment in order to utilize the full amount of money set aside for the payment of salaries. Great care must be exercised, however, not to exceed this amount. When recommending appointments in excess of the full summer force, attention must be called to the fact that the additional appointments are desired for the purpose above stated.

As a result of discussion at the recent supervisors' meeting at Helena, Mont., on the merits of the Rangers' Notebook, Form 874, the general opinion of the supervisors present was that the forms are too small and the book so unsatisfactory in many ways that its use should be discontinued. An expression of opinion on the subject from officers in the field is desired.

SERVICE ORDERS.

SERVICE ORDER 6.

SEPTEMBER 20, 1907.

Annual Ranger Meetings.

The instructions in the paragraph headed "Annual Ranger Meetings," under Regulation 1 (The Use Book, p. 26), are amended as follows:

Ranger meetings should be held, as far as possible, not in towns but on the Forests. Meetings in the larger towns and cities should especially be avoided.

JAMES B. ADAMS,
Acting Forester.

SERVICE ORDER 7.

SEPTEMBER 20, 1907.

[Amends Service Order 106.]

Name of Forest on Supervisors' Letters to the Forester.

Hereafter, upon each letter written by a supervisor to the Forester will appear, above the date line, the name of the Forest of which the supervisor is in charge. In case a supervisor has more than one Forest, the name of the Forest to which the subject-matter of the letter pertains should be used. Upon requisition suitable stamps will be furnished to all supervisors who are not already supplied with them.

JAMES B. ADAMS,
Acting Forester.

SERVICE ORDER 8.

SEPTEMBER 27, 1907.

[Supplements National Forest Order No. 23, Part IV.]

Ranger Station Selections in Forests where Sheep are Grazed.

The attention of supervisors and rangers is called to the necessity of selecting a sufficient number of ranger stations. It is not essential that all stations be chosen with a view to securing a piece of agricultural land or a nursery site, since many of the stations will be used only during the summer for pasture purposes. In many cases Forest officers have been seriously handicapped by a shortage of pasture toward the end of summer. This condition is most frequently met with in Forests where sheep are grazed. As early as July 1 it is often difficult to find suitable camping grounds which have not been made useless by sheep. When such conditions exist so early in the summer, it is quite evident that later in the season Forest officers will be compelled to buy and pack grain for their saddle stock. Numerous pastures and camping grounds should be selected and the boundaries thoroughly posted, so that the herders will keep their sheep away. When properly distributed, such pasture will afford good grass for rangers' stock all the season.

Supervisors and rangers are therefore urgently requested to select numerous small pastures and camping sites within the sheep range. Many of these pastures need not exceed 40 acres in extent, and may very often be situated within 2 miles of each other. A distance apart of more than 3 or 4 miles is not desirable except when water or other essentials can not be found within that distance.

When money and time are available, a number of these pastures can be fenced. This will be a great convenience to the ranger force and also to herders and packers, who may very properly be allowed to keep their horses in the Service pastures.

JAMES B. ADAMS,
Acting Forester.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR NOVEMBER, 1907.

This program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Principal Examiner.

HERBERT A. SMITH, Editor.

GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, Chief Inspector, Missoula, Mont.

Inspectors: P. G. REDINGTON, F. A. SILCOX, GEO. H. CECIL, and C. H. ADAMS, all at Missoula, Mont.

Inspection District 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, Kansas, Southeastern Montana, and Southeastern Utah.

SMITH RILEY, Chief Inspector, Denver, Colo.

Inspectors: R. P. IMES, T. D. WOODBURY, and F. W. MORRELL, all at Denver, Colo.

Inspection District 3.—Arizona, New Mexico, and Oklahoma.

D. D. BRONSON, Chief Inspector, Albuquerque, N. Mex.

Inspectors: T. S. WOOLSEY, Jr., W. R. MATTOON, A. O. WAHA, and WILL C. BARNES, all at Albuquerque, N. Mex.

Inspection District 4.—Utah, Southern Idaho, Western Wyoming, Eastern Nevada, and Northern Arizona.

R. E. BENEDICT, Chief Inspector, Salt Lake City, Utah.

Inspectors: F. W. REED, J. M. FETHEROLF, and L. L. WHITE, all at Salt Lake City, Utah.

Inspection District 5.—California and Western Nevada.

F. E. OLMSTED, Chief Inspector, San Francisco, Cal.

Inspectors: COERT DU BOIS, J. H. HATTON, WM. C. HODGE, Jr., G. W. PEAVY, S. J. FLINTHAM, and J. K. CAMPBELL, all at San Francisco, Cal.

Inspection District 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, Chief Inspector, Portland, Oreg.

Inspectors: M. L. ERICKSON, W. H. B. KENT, and F. E. AMES, all at Portland, Oreg.

White Mountain and Appalachian Investigation: WM. L. HALL, *Assistant Forester*, in Charge; assistants, A. K. CHITTENDEN, R. S. KELLOGG, and W. W. ASHE.

E. S. BRUCE, *Expert Lumberman and Special Inspector*, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. COX, Assistant Forester, in Charge.

OFFICE OF MANAGEMENT.

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W. G. WEIGLE, Assistant Chief.

Timber Sales, E. H. CLAPP, Chief.

G. M. HOMANS, Assistant Chief.

Timber Sale Correspondence.

Districts 1, 2, and 4—ZEPH JONES, R. Y. STUART.

District 3—A. B. RECKNAGEL.

District 5—I. F. ELDREDGE.

District 6—G. P. BARD.

FRED LEES—*Trespass*.

Temporary assignments for work on important sales under the direction of supervisors:

W. T. ANDREWS, Lumberman, Boise, Idaho.

J. S. BAIRD, Lumberman, Cass Lake, Minn.

M. BURNS, Lumberman, Cass Lake, Minn.

GEO. L. COTT, Lumberman, Magdalena, N. Mex.

NILS ECKBO, Forest Agent, Newport, Wash.

C. A. GALARNEAU, Forest Assistant, Sisson, Cal.

GEO. P. GREGG, Lumberman, Keystone, Wyo.

P. T. HARRIS, Forest Assistant, Helena, Mont.

C. S. JUDD, Forest Assistant, Beckwith, Cal.

W. E. LA FOUNTAIN, Lumberman, Washington, D. C.

D. T. MASON, Forest Assistant, Durango, Colo.

W. R. MCKINNON, Lumberman, Cass Lake, Minn.

A. J. NORTON, Lumberman, Kalispell, Mont.

J. F. PRESTON, Forest Assistant, Neihart, Mont.

J. D. WARNER, Forest Assistant, Wallace, Idaho.

Reconnaissance, S. J. RECORD.

Montana—

Preparation of volume table for western larch—LOUIS MARGOLIN, W. B. PIPER, and J. REBMANN, Kalispell, Mont.

Washington—

Working plan for Chelan Basin—MAX ROTHKUGEL, Chelan.

Cooperation, J. S. HOLMES, Acting.

PROJECTS.

Eastern States—

Timberland examinations—W. D. STERRETT, Washington, D. C.

Kentucky—

Preparation of report on forest conditions—WESLEY BRADFIELD, R. G. POND, and MAX PFAENDER, Washington, D. C.

Mississippi—

Study of forest conditions in cooperation with the State Geological Survey—J. S. HOLMES and R. G. POND, Jackson.

Montana—

Study of forest conditions in cooperation with the Northern Pacific Railroad Company—KARL WOODWARD, in charge, Kalispell, Mont.; assistants, S. L. MOORE, J. ST. J. BENEDICT, L. S. MURPHY, R. M. MACMURRAY, F. TOMPKINS, W. S. UHLER, and G. E. SAWYER, Kalispell.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Mexico—

Supervision of cutting, Fort Wingate Military Reservation, in cooperation with the War Department—NELSON LE GRAND, Guam, N. Mex.

Wisconsin—

Working plans for timber sales on Indian reservations, in cooperation with the State and U. S. Indian Office—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Jr., Odanah.

Forest Atlas, F. G. PLUMMER, Point Loma, Cal.

Assignments for the instruction of rangers in surveying and mapping under the direction of supervisors: D. C. HARRISON, Topographer, Kalispell, Mont.; C. C. BASSETT, Topographer, Santa Fe, N. Mex.

OFFICE OF SILVICS.

RAPHAEL ZON, Chief.

Field Studies, RAPHAEL ZON.

PROJECTS.

Colorado—

Location and estimate of timber infested by the Black Hills beetle, the Engelmann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins, in charge)—W. D. EDMONSTON, Larkspur, Colo.

Eastern States—

Study of the hickories—A. T. BOISEN, 307 E. Second street, Bloomington, Ind.; assistant, C. G. BATES, General Delivery, Memphis, Tenn.

Montana—

Study of cut-over areas of lodgepole pine—E. R. HODSON, Washington, D. C.

Northeastern States—

Study of the birches—S. T. DANA, 395 Spring street, Portland, Me.

New England—

Study of the white pine disease, its extent, amount of damage caused, and practical measures for preventing its spread, in cooperation with the Division of Forest Pathology—S. T. DANA, 395 Spring street, Portland, Me.

Rocky Mountain States—

Study of Engelmann spruce, with special reference to its growth, volume, and reproduction—J. H. FOSTER, Washington, D. C.

Study of Douglas fir, with special reference to its growth, volume, and reproduction—E. H. FROTHINGHAM, Washington, D. C.

Utah—

Location of insect-infested timber in the Grand Canyon National Forest, and investigation of facilities for removing standing timber; in cooperation with the Bureau of Entomology (forest insect investigations, Dr. A. D. HOPKINS in charge)—MORRIS CHRISMAN, Paradise, Ariz.

Library, H. E. STOCKBRIDGE.

Compilation, E. H. FROTHINGHAM.

OFFICE OF EXTENSION.

SAMUEL N. SPRING, Chief.

Planting, L. C. MILLER.

Preparation and revision of plans for planting stations—J. F. KÜMMEL, Washington, D. C.

Compilation of data on ranger nurseries—G. B. McDONALD, Washington, D. C.

Reconnaissance, W. H. VON BAYER.

PROJECTS.

Preliminary examination of Illinois and Mississippi (Hennepin) Canal to determine the advisability of forest planting on portions of the right of way—W. H. VON BAYER, Rock Island, Ill.

Preparation of reports on watershed studies—C. A. KUPFER, Washington, D. C.

Cooperation, A. S. PECK, Acting.

PROJECTS.

Revision and compilation of data on cooperative planting—W. M. MOORE, Washington, D. C.

Hawaii—

Experimental planting—R. S. HOSMER, Collaborator, Honolulu.

Mississippi—

Experimental planting—G. L. CLOTHIER, Collaborator, Agricultural College.

Nebraska—

Experimental planting—F. J. PHILLIPS, Collaborator, Lincoln.

BRANCH OF GRAZING.

A. F. POTTER, Assistant Forester, in Charge.

OFFICE OF CONTROL.

L. F. KNEIPP, Acting Chief.

Allotment, WILL C. BARNES.

Adjustment, JOHN D. LELAND,

Permits, Miss ANNA P. KOSCHWITZ.

OFFICE OF DEVELOPMENT.**W. C. CLOS, Acting Chief.**

Fences, C. H. ADAMS.

Forage, W. C. CLOS.

Water, J. K. CAMPBELL.

PROJECTS.

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; JAMES F. JARDINE, Expert, Washington, D. C.; ARTHUR T. SAMPSON, Expert, Washington, D. C.; G. A. PEARSON, Forest Assistant, Washington, D. C.

Poisonous plant investigations—Prof. C. D. MARSH, Expert, Bureau of Plant Industry, in charge, Hugo, Colo.; IVAR TIDESTROM, Scientific Assistant, Washington, D. C.

BRANCH OF PRODUCTS.**WM. L. HALL, Assistant Forester, in Charge.****OFFICE OF WOOD UTILIZATION.****E. A. ZIEGLER, Acting Chief.**

Computing, Miss E. B. STABLER, Acting.		Wood Chemistry, H. S. BRISTOL.
Drafting, C. A. KOLB.		Wood Uses, M. CLINE.

PROJECTS.**California—**

Tests of the strength of eucalyptus, redwood, and tanbark oak, in cooperation with the University of California and the Northwestern Redwood Company—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Study of the uses of western hardwoods—H. S. SACKETT, Berkeley.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, H. E. MCKENZIE and CORNELIUS BARRY.

Leaching studies—D. C. PARMELEE, Yale Station, New Haven.

Florida—

Turpentine orcharding experiments—P. D. EDMUNDS, Green Cove Springs.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN and J. O. BIXBY.

Washington—

Tests of western hemlock and National Forest woods, in cooperation with the University of Washington—O. P. M. GOSS, University Station, Seattle; assistant, G. R. GESSERT.

General Studies—

Washington office, timber tests—H. S. BETTS, in charge; assistants, T. W. VENEMANN, ROLF THELEN, and J. B. KNAPP.

Collection of statistics of forest products, in cooperation with the Bureau of the Census—W. B. BARROWS, Washington, D. C.; GEORGE K. SMITH, Victoria Building, St. Louis, Mo.

Study of furniture woods—A. H. PIERSON, Washington, D. C.

Study of commercial processes of wood distillation—L. F. HAWLEY, Washington, D. C.

Study of chemical problems in wood utilization—ERNEST BATEMAN and E. SUTERMEISTER, Washington, D. C.; A. L. DEAN, 93 Broad street, Boston, Mass.

- Studies in the heat conductivity of wood—FREDERICK DUNLAP, Washington, D. C.
 Study of markets for forest products—H. M. HALE, Washington, D. C.
 Study of National Forest woods—H. B. HOLROYD, Washington, D. C.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief.

PROJECTS.

Alabama—

Preservative treatment of fence posts and other farm timbers, in cooperation with the State Department of Agriculture and Industries—C. L. HILL, care J. A. WILKINSON, Commissioner of Agriculture and Industries, Montgomery.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Woodward, Los Angeles; assistants, O. T. SWAN, Hotel Sequoia, Fresno, and W. H. KEMPFER, 212 South Grand avenue, Los Angeles.

Connecticut—

Experiments to ascertain the effects of live steam and vacuum as ordinarily used at commercial treating plants on the moisture content and absorptive qualities of different kinds of wood—C. STOWELL SMITH, Yale Forest School, New Haven.

Louisiana—

Experiments to devise a system for treating the products of southern lumber mills, in cooperation with the Great Southern Lumber Company—H. F. WEISS, Bogalusa.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Wisconsin—

The laying of an experimental track with hemlock and tamarack cross-ties to test the value of seasoning and treating, and of various devices for reducing the mechanical wear of the rails; in cooperation with the Chicago and Northwestern Railway Company—H. A. PAUL, Janesville.

General Studies—

Correlation of data on the preservative treatment of American and foreign woods—M. C. JENSEN, Washington, D. C.

Reconnaissance of experimental treatments in the Southern States—W. F. SHERFESEE, Exchange Hotel, Montgomery, Ala., until November 5; from November 6 to November 15, Bogalusa, La.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief.

Articles, T. CLEVELAND, Jr.

Review, FINDLEY BURNS.

Printing, QUINCY R. CRAFT.

Distribution, BRISTOW ADAMS.

Education, H. A. WINKENWERDER.

PUBLICATIONS IN OCTOBER

Circular 64 (Revised). Black Locust.

Circular 111. Prolonging the Life of Mine Timbers.

Circular 115. Second Progress Report on the Strength of Structural Timbers.

Silvical Leaflet 3. Englemann Spruce.

Silvical Leaflet 4. White Fir.

Silvical Leaflet 5. Lowland Fir.

Silvical Leaflet 6. Sitka Spruce.

- Silvical Leaflet 7. Noble Fir.
 Silvical Leaflet 8. Red Fir (*Abies magnifica*).
 Silvical Leaflet 9. Incense Cedar.
 Silvical Leaflet 10. Bigcone Spruce.
 Silvical Leaflet 11. Giant Arborvitæ.
 Silvical Leaflet 13. Western White Pine.
 Silvical Leaflet 14. Western Larch.

BRANCH OF OPERATION.

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CHAS. S. CHAPMAN, in Charge.

GEO. G. ANDERSON, Assistant in Office Methods.

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 Bookkeeping, **O. H. TIBBOTT**.

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Receipts, Miss **MARY R. LATIMER**.

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Purchase, **H. C. TOWERS**.
 Record, **H. C. METCALF**.
 Supplies, **A. M. SMITH**.

Photography, **A. G. VARELA**.
 Property Auditor, **J. G. FALCK**.

OFFICE OF LANDS.

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C. H. SQUIRE, Acting.

Claims, **F. L. HARVEY**.

Settlement, **A. C. RINGLAND**, Acting.
 Status, **J. B. SATTERLEE**.

Boundaries, **H. O. STABLER**, Acting.

OFFICE OF ENGINEERING.

W. E. HERRING, Chief.

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CLYDE LEAVITT, Assistant Chief.

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ROSS McMILLAN, Forest Supervisor, District 3.

HOMER E. FENN, Forest Supervisor, District 4.

WILLIS M. SLOSSON, Forest Supervisor, District 5.

A. E. COHOON, Deputy Forest Supervisor, District 6.

NATIONAL FORESTS.

(Numerals following National Forests indicate Inspection Districts.)

ALASKA.

Alexander Archipelago—**W. A. LANGILLE**, Forest Supervisor, Ketchikan. (6)

Afognak—**W. A. LANGILLE**, Forest Supervisor, Ketchikan. (6)

Chugach—**W. A. LANGILLE**, Forest Supervisor, Ketchikan. (6)

Tongass—**W. A. LANGILLE**, Forest Supervisor, Ketchikan. (6)

ARIZONA.

- Baboquivari**—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)
Black Mesa (N.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)
Black Mesa (S.)—DRAYTON C. MARTIN, Acting Forest Supervisor, Clifton. (3)
Chiricahua—C. T. MCGLONE, Forest Supervisor, Douglas; H. D. BURRALL, Forest Assistant. (3)
Dragoon—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant.
Grand Canyon (N.)—SELDEN F. HARRIS, Forest Supervisor, Kanab, Utah; LORUM PRATT, Deputy Forest Supervisor. (4)
Grand Canyon (S.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)
Huachuca—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)
Mount Graham—THEODORE T. SWIFT, Acting Forest Supervisor, Safford. (3)
Pinal Mountains—THEODORE T. SWIFT, Acting Forest Supervisor, Safford. (3)
Prescott—F. C. W. POOLER, Forest Supervisor, Prescott. (3)
San Francisco Mountains—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON and WILLARD M. DRAKE, Forest Assistants. (3)
Santa Catalina—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant. (3)
Santa Rita—ROBERT J. SELKIRK, Acting Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant. (3)
Tonto—W. H. REED, Forest Supervisor, Roosevelt. (3)
Tumacacori—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)

CALIFORNIA.

- Diamond Mountain**—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor. (5)
Inyo—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Klamath—R. L. P. BIGELOW, Forest Supervisor, Yreka. (5)
Lassen Peak—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor. (5)
Modoc—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)
Monterey—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Pinnacles—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Plumas—L. A. BARRETT, Forest Supervisor, Quincy; L. A. H. KLING, Deputy Forest Supervisor. (5)
San Bernardino—R. H. CHARLTON, Forest Supervisor, Los Angeles. (5)
San Gabriel—R. H. CHARLTON, Forest Supervisor, Los Angeles; Pasadena Planting Station—E. C. CLIFFORD, Pasadena; SEROPE Y. PARNAY, Forest Expert. (5)
San Jacinto—H. A. E. MARSHALL, Forest Supervisor, Hemet. (5)
San Luis Obispo—E. S. MAINWARING, Forest Supervisor, San Luis Obispo. (5)
Santa Barbara—STEPHEN H. DOUGLASS, Acting Forest Supervisor, Santa Barbara; H. G. MERRILL, Forest Assistant; San Marcos Planting Station—B. R. H. D'ALLEMAND; assistant, H. C. MUZZALL, Santa Barbara. (5)
Shasta—G. A. COLEMAN, Forest Supervisor, Sisson; R. F. HAMMATT, Forest Assistant. (5)
Sierra (N.)—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS and JOHN MURDOCH, Jr., Forest Assistants. (5)
Sierra (S.)—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, F. B. KELLOGG, D. N. ROGERS, and C. M. GRANGER, Forest Assistants. (5)
Sierra (E.)—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Stanislaus—S. L. N. ELLIS, Forest Supervisor, Sonora; R. W. AYRES, Forest Assistant. (5)
Stony Creek—ERNEST BRITTEN, Acting Forest Supervisor, Elk Creek. (5)
Tahoe—MADISON B. ELLIOTT, Forest Supervisor, Nevada City; M. B. PRATT, Forest Assistant. (5)
Trabuco Canyon—H. A. E. MARSHALL, Forest Supervisor, Hemet. (5).
Trinity—F. H. HAFLEY, Forest Supervisor, Weaverville. (5)
Warner Mountains—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)

COLORADO.

- Battlement Mesa**—DAVID ANDERSON, Forest Supervisor, Collbran. (2)
Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache. (2)
Fruita—H. K. PORTER, Forest Supervisor, Delta; J. H. RAMSKILL, Forest Assistant. (2)
Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison; E. C. BERKY, Deputy Forest Supervisor. (2)
Holy Cross—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; SWIFT BERRY, Forest Assistant. (2)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab, Utah. (2)
Las Animas—D. E. FITTON, Acting Forest Supervisor, La Veta. (2)
Leadville—A. L. STROUP, Forest Supervisor, Leadville; J. F. BRUNS, Forest Assistant. (2)
Medicine Bow (Colo. Div.)—HERBERT N. WHEELER, Forest Supervisor, Estes Park. (2)
Montezuma—ERNEST W. SHAW, Forest Supervisor, Durango. (2)
Ouray—H. K. PORTER, Acting Forest Supervisor, Delta; J. H. RAMSKILL, Forest Assistant. (2)
Park Range—THOMAS HOGAN, Forest Supervisor, Steamboat Springs. (2)
Pikes Peak—THOS. H. SHERRARD, Forest Supervisor, Denver; W. J. MORRILL, Forest Assistant. (2)
San Isabel—C. J. STAHL, Acting Forest Supervisor, Westcliffe. (2)
San Juan—F. C. SPENCER, Forest Supervisor, Monte Vista; A. A. PARKER, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant. (2)
Uncompahgre—H. K. PORTER, Forest Supervisor, Delta; J. H. RAMSKILL, Forest Assistant. (2)
Wet Mountains—C. J. STAHL, Acting Forest Supervisor, Westcliffe. (2)
White River—JAMES A. BLAIR, Forest Supervisor, Meeker; I. T. WORTHLEY, Forest Assistant. (2)

IDAHO.

- Bear River**—W. W. CLARK, Forest Supervisor, Logan, Utah; J. F. SQUIRES, Deputy Forest Supervisor. (4)
Big Hole (S.)—J. B. SEELY, Forest Supervisor, Sheridan, Mont. (1)
Bitter Root—F. A. FENN, Forest Supervisor, Kooskia. (1)
Cabinet (N.)—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
Caribou—J. T. WEDEMEYER, Forest Supervisor, Idaho Falls. (4)
Cassia—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Coeur d'Alene—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; J. E. BARTON, Deputy Forest Supervisor. (1)
Henrys Lake—FOSTER STEELE, Acting Forest Supervisor, St. Anthony; A. D. READ, Forest Assistant. (4)
Kootenai—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
Lemhi (N.)—GEORGE G. BENTZ, Forest Supervisor, Salmon City. (4)
Lemhi (S.)—GUY B. MAINS, Forest Supervisor, Mackay. (4)
Palouse—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; J. E. BARTON, Deputy Forest Supervisor. (1)
Payette—EMIL GRANDJEAN, Forest Supervisor, Boise; O. M. BUTLER, Forest Assistant. (4)
Pocatello—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Port Neuf—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Priest River—R. L. FROMME, Acting Forest Supervisor, Newport, Wash. (1)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Salmon River—GEORGE G. BENTZ, Forest Supervisor, Salmon City. (4)
Sawtooth—EMIL GRANDJEAN, Forest Supervisor, Boise; O. M. BUTLER, Forest Assistant. (4)
Weiser—J. B. LAFFERTY, Forest Supervisor, Weiser; WALTER M. CAMPBELL, Deputy Forest Supervisor; C. G. SMITH, Forest Assistant. (4)
Yellowstone (Idaho Div.)—FOSTER STEELE, Acting Forest Supervisor, St. Anthony; A. D. READ, Forest Assistant. (4)

KANSAS.

- Garden City**—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr. (2)

MINNESOTA.

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake. (2)

MONTANA.

- Big Belt**—R. W. STUART, Forest Supervisor, Townsend. (1)
Big Hole (Anaconda Div.)—CHARLES C. HALL, Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
Big Hole (N.)—C. K. WYMAN, Forest Supervisor, Dillon; ROBT. J. MOORE, Deputy Forest Supervisor. (1)
Big Hole (S.)—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Bitter Root (Montana Div.)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Cabinet (N.)—D. G. KINNEY, Forest Supervisor, Libby. (1)
Cabinet (S.)—F. A. SILCOX, Acting Forest Supervisor, Thompson Falls; ROY HEADLEY, Deputy Forest Supervisor. (1)
Crazy Mountains—E. C. RUSSELL, Forest Supervisor, Livingston. (1)
Ekalaka—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Elkhorn—R. W. STUART, Forest Supervisor, Townsend. (1)
Gallatin—DAVID CONKLING, Forest Supervisor, Bozeman. (1)
Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant. (1)
Hell Gate (E.)—CHARLES C. HALL, Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
Hell Gate (W.)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Highwood Mountains—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
Kootenai—D. G. KINNEY, Forest Supervisor, Libby. (1)
Lewis and Clark (N.)—F. N. HAINES, Forest Supervisor, Kalispell. (1)
Lewis and Clark (S.)—PAGE S. BUNKER, Forest Supervisor, Kalispell. (1)
Little Belt—GEO. H. CECIL, Acting Forest Supervisor, Neihart. (1)
Little Rockies—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
Lolo—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Long Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Madison—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Missoula—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor. (1)
Otter—A. C. MCCAIN, Acting Forest Supervisor, Ashland. (1)
Pryor Mountains—H. W. THURSTON, Forest Supervisor, Cody, Wyo. (1)
Snowy Mountains—GEO. H. CECIL, Acting Forest Supervisor, Neihart. (1)
Yellowstone (Absaroka Div.)—E. C. RUSSELL, Forest Supervisor, Livingston. (1)

NEBRASKA.

- Dismal River**—C. A. SCOTT, Forest Supervisor, Halsey. Halsey Planting Station—W. H. MAST. (2)
Niobrara—C. A. SCOTT, Forest Supervisor, Halsey. (2)
North Platte—C. A. SCOTT, Forest Supervisor, Halsey. (2)

NEVADA.

- Charleston**—HARRY E. MATTHEWS, Acting Forest Supervisor, Las Vegas. (4)
Independence—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Monitor—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)
Ruby Mountains—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Tahoe—M. B. ELLIOTT, Forest Supervisor, Nevada City, Cal.; M. B. PRATT, Forest Assistant. (5)
Toiyabe—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)
Toquima—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)

NEW MEXICO.

- Big Burros**—R. C. McCLURE, Forest Supervisor, Silver City; DOUGLAS RODMAN and R. F. BALTHIS, Forest Assistants. (3)
- Gallinas**—J. H. KINNEY, Forest Supervisor, Capitan. (3)
- Gila (N.)**—JOHN KERR, Forest Supervisor, Magdalena. (3)
- Gila (S.)**—R. C. McCLURE, Forest Supervisor, Silver City; W. H. GODDARD, Deputy Forest Supervisor; DOUGLAS RODMAN and R. F. BALTHIS, Forest Assistants. Fort Bayard Planting Station—W. B. HADLEY, Forest Assistant, Fort Bayard. (3)
- Guadalupe**—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JANES, Forest Assistant. (3)
- Jemez**—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe; ELWOOD I. TERRY, Forest Assistant. (3)
- Lincoln**—J. H. KINNEY, Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Fort Stanton. (3)
- Magdalena**—JOHN KERR, Forest Supervisor, Magdalena. (3)
- Manzano**—HUGH H. HARRIS, Forest Supervisor, Albuquerque. (3)
- Mount Taylor**—HUGH H. HARRIS, Forest Supervisor, Albuquerque. (3)
- Pecos River**—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe; ELWOOD I. TERRY, Forest Assistant. Las Gallinas Planting Station—W. D. HAYES, East Las Vegas. (3)
- Peloncillo**—C. T. MCGLONE, Forest Supervisor, Douglas, Ariz.; H. D. BURRALL, Forest Assistant. (3)
- Sacramento**—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JANES, Forest Assistant. (3)
- San Mateo**—JOHN KERR, Forest Supervisor, Magdalena. (3)
- Taos**—THOS. R. STEWART, Acting Forest Supervisor, Santa Fe; ELWOOD I. TERRY, Forest Assistant. (3)

OKLAHOMA.

- Wichita**—W. R. MATTOON, Acting Forest Supervisor, Cache. (3)

OREGON.

- Ashland**—M. J. ANDERSON, Forest Supervisor, Grants Pass; HUGH M. GUTHRIE, Deputy Forest Supervisor; N. F. MACDUFF, Forest Assistant. (6)
- Blue Mountains (E.)**—HENRY IRELAND, Forest Supervisor, Sumpter. (6)
- Blue Mountains (W.)**—A. S. IRELAND, Forest Supervisor, Prineville; CY. J. BINGHAM, Deputy Forest Supervisor. (6)
- Bull Run**—R. B. WILSON, Forest Supervisor, Portland. (6)
- Cascade (N.)**—R. B. WILSON, Forest Supervisor, Portland. (6)
- Cascade (S.)**—S. C. BARTRUM, Forest Supervisor, Roseburg. (6)
- Coquille**—M. J. ANDERSON, Forest Supervisor, Grants Pass; HUGH M. GUTHRIE, Deputy Forest Supervisor; N. F. MACDUFF, Forest Assistant. (6)
- Fremont**—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
- Goose Lake**—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
- Heppner**—THOMAS E. CHIDSEY, Forest Supervisor, Heppner. (6)
- Imnaha**—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa; HARVEY W. HARRIS, Deputy Forest Supervisor. (6)
- Siskiyou**—M. J. ANDERSON, Forest Supervisor, Grants Pass; HUGH M. GUTHRIE, Deputy Forest Supervisor; N. F. MACDUFF, Forest Assistant. (6)
- Tillamook**—C. R. SEITZ, Forest Supervisor, Eugene. (6)
- Umpqua**—C. R. SEITZ, Forest Supervisor, Eugene. (6)
- Wenaha**—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash. (6)

SOUTH DAKOTA.

- Black Hills**—E. M. HAMILTON, Acting Forest Supervisor, Deadwood; H. J. BROWN and H. C. NEEL, Forest Assistants. (2)
- Cave Hills**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
- Short Pine**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
- Slim Buttes**—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)

UTAH.

- Aquarius**—GEORGE H. BARNEY, Forest Supervisor, Escalante. (4)
Bear River—W. W. CLARK, Forest Supervisor, Logan; J. F. SQUIRES, Deputy Supervisor. (4)
Beaver—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Dixie—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George. (4)
Fillmore—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Fish Lake—N. E. SNELL, Forest Supervisor, Salina. (4)
Glenwood—N. E. SNELL, Forest Supervisor, Salina. (4)
Grantsville—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Manti—A. W. JENSEN, Forest Supervisor, Ephraim. (4)
Monticello—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Payson—WALTER F. BROUGH, Acting Forest Supervisor, Payson. (4)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello, Idaho. (4)
Salt Lake—E. H. CLARKE, Forest Supervisor, Salt Lake City; Wasatch Planting Station—N. J. FETHEROLF. (4)
Sevier—TIMOTHY C. HOYT, Forest Supervisor, Panguitch. (4)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo; D. S. MARSHALL, Deputy Forest Supervisor; WM. M. ANDERSON, Deputy Forest Supervisor. (4)
Vernon—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
Wasatch—E. H. CLARKE, Forest Supervisor, Salt Lake City. (4)

WASHINGTON.

- Colville**—W. W. CRYDER, Forest Supervisor, Republic. (6)
Olympic—FRED HANSON, Forest Supervisor, Hoodspert. (6)
Priest River—R. L. FROMME, Acting Forest Supervisor, Newport. (1)
Rainier—G. F. ALLEN, Forest Supervisor, Orting. (6)
Washington (E.)—G. W. MILHAM, Forest Supervisor, Chelan. (6)
Washington (W.)—CHAS. W. ARMSTRONG, Acting Forest Supervisor, Sumas; B. P. KIRKLAND, Forest Assistant. (6)
Washington (Yakima Div.)—D. B. SELLER, Forest Supervisor, Wenatchee. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla. (6)

WYOMING.

- Bear Lodge**—E. M. HAMILTON, Acting Forest Supervisor, Deadwood, S. Dak.; H. J. BROWN and H. C. NEEL, Forest Assistants. (2)
Big Horn—W. E. JACKSON, Forest Supervisor, Big Horn. (1)
Black Hills—J. F. SMITH, Forest Supervisor, Deadwood, S. Dak.; H. J. BROWN, Forest Assistant. (2)
Caribou—J. T. WEDEMAYER, Forest Supervisor, Idaho Falls, Idaho. (4)
Crow Creek—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
Medicine Bow (Wyo. Div.)—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
Sierra Madre—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo, Utah; D. S. MARSHALL, WM. M. ANDERSON, Deputy Forest Supervisors. (4)
Yellowstone (Shoshone Div.)—H. W. THURSTON, Forest Supervisor, Cody; C. N. WHITNEY, Forest Assistant. (1)
Yellowstone (Teton Div.)—ROBT. E. MILLER, Forest Supervisor, Jackson. (4)
Yellowstone (Wind River Div.)—ZEPH JONES, Forest Supervisor, Pinedale. (4)

SERVICE CHANGES IN OCTOBER.

APPOINTED.

Forester—

INFORMATION—THOMAS R. SHIPP, Expert.

Products—

WOOD UTILIZATION—L. F. HAWLEY, Expert.

PUBLICATION—EVERETT W. SMITH, Expert.

Silviculture—

MANAGEMENT—NELSON LeGRAND, Forest Agent; R. S. MACKINTOSH, Col-laborator.

EXTENSION—G. B. McDONALD, Forest Agent.

Operation—

ENGINEERING—JOS. P. MARTIN, Constructing Engineer; JOS. Y. WORK, Con-structing Engineer; E. H. JONES, Civil Engineer; T. L. DAY, Telephone Expert; E. R. HARRISON, Civil Engineer; ANDREW P. IVERSON, Telephone Lineman.

LANDS—E. C. HARD, Expert Miner.

PROMOTED.**Products—**

WOOD UTILIZATION—GEORGE HILTON, Draftsman.

RESIGNED.**Products—**

WOOD UTILIZATION—F. T. SCANLON, Laboratory Assistant.

Silviculture—

SILVICS—F. E. CLEMENTS, Special Agent.

SUSPENDED.**Operation—**

ORGANIZATION—IRA E. TODD, Forest Supervisor, Little Belt National Forest, Montana.

SERVICE NOTES FOR NOVEMBER.

OFFICE OF THE FORESTER.

LAW.

Grazing Trespass—

The following quotations are taken from Judge Carland's charge to the jury in the case of *United States v. R. E. Bale* (Black Hills National Forest), which was decided in the United States district court of South Dakota on September 5, after a demurrer to the indictment had been overruled:

Under this authority, conferred by the act of Congress mentioned [act of June 4, 1897, 30 Stat., 11], the Secretary of the Interior, and subsequently the Secretary of the Department of Agriculture, to whom the powers vested formerly in the Secretary of the Interior have been transferred, promulgated a rule to the effect that no person shall graze cattle upon these forest reservations without first obtaining a permit from the proper authority. It being perfectly competent for Congress to confer this power upon the Secretary of the Interior, and subsequently to transfer it to the Secretary of Agriculture, and the rule itself being within the power conferred by the act of Congress upon these officers, it can not be said that there was a delegation of legislative power by Congress to these officers, for the reason that the act of Congress itself provides and fixes the punishment for the violation of the rule, and the offense is not created, as contended by some, by the Secretary of Agriculture.

* * * * *

A person would be held to graze cattle upon a forest reservation if he knowingly drove cattle upon the same for that purpose, or if, knowing his cattle are grazing upon such reservation, he allows them to remain there without immediately removing them therefrom and thereafter keeping them from returning thereto.

In this case, gentlemen of the jury, there is no claim that the defendant ever procured any permit, and the question of the guilt or innocence of the defendant in this case all turns upon the question as to whether he grazed any cattle upon this forest reservation as charged in the indictment; therefore the question in this case is, Did the defendant use all the means within his power to keep his cattle off the reserve. If he did, and, notwithstanding his efforts, his cattle escaped and went on the reserve he could not be said to have grazed his cattle upon the reserve. On the other hand, if he knowingly drove the cattle on the reserve for grazing or negligently or carelessly allowed his cattle to go upon the reserve to graze, and knowing them to be there, did not use all the efforts within his power to remove them therefrom and keep them off, then he would be held to have grazed his cattle upon the reservation.

The jury returned a verdict of guilty and the trespasser was fined \$100 and costs. This he paid at once and was thereupon released.

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Class A Sales—

Attention is called to Regulation 24, page 63 of The Use Book. Supervisors should not fail to recommend all Forest officers, to whom they desire that authority be given, to make Class A sales. The price at which the timber is to be sold in Class A and B sales is exceedingly important and Forest officers should be guided by the instructions under "Prices" on page 75 of The Use Book. Favorable prices obtained in Class C sales may be taken as a basis.

Hereafter a map will not be required in Class A sales of green timber where the value is \$20 or less, but one should, in each case where the value of the timber exceeds \$20, be prepared and filed in the proper folder as before.

Advertised Class B Sales—

The circular of instructions which was issued on the method of handling advertised Class B sales, through an oversight, does not require supervisors to send to the Forester copies of the application, map, timber estimate, and forest description, and rules for marking. It was intended that this should be required by the instructions, and supervisors are requested to forward copies of these papers as soon as prepared.

Free Use—

In the reprint of The Use Book, Regulation 22, page 50, will read as follows:

All free-use material may be sawed, and all except green saw timber may be cut for the permittee by an agent, but the work so done must not be paid for by a share of the material. When a permittee is physically incapable of doing the work, he may hire an agent to cut green saw timber, but can not pay for the work by a share of the material.

This is a slight change in the wording of the regulation as it appeared in the first issue of The Use Book. It is not intended by this regulation, as it first appeared, that persons physically incapable of doing the work can pay for it with a share of the material, but simply that they can hire the work done. It is necessary, of course, that payment should be made otherwise than with a part of the material. A few of the officers seem to have misunderstood this regulation.

Extension of Time in Timber Sales—

Before granting an extension of time in Class A or B timber-sale contracts, supervisors should consider carefully the current stumpage rates. A reasonable time should be allowed in the original contract for the cutting and removal of the timber, and, as a rule, the stumpage should be raised to the current price if an extension of time is allowed.

Information of Informal Applications—

When informal applications for large amounts of timber are received, supervisors are requested to inform the Forester promptly in order that timber-sale men may, if advisable, be detailed temporarily to assist in preparing the timber estimate and forest description.

Sales in Excess of \$100—

The authority to approve sales in excess of \$100 which has recently been granted to the supervisors of some Forests must not be construed to apply to any Forest officer other than the one named in the authorization.

Brush Burning—

Experience has proven that the kerosene torch is the most satisfactory device for brush burning. This torch should be of the stationary type and made to hold approximately one quart.

All Forest officers in charge, who expect to burn much brush this season, should purchase at their earliest convenience as many of these torches as may be necessary for the prompt completion of the work.

Error in Use Book Corrected—

The word "calendar" in the first line on page 158 of "The Use Book" should be corrected to read "fiscal."

OFFICE OF SILVICS.**New Forest Literature—Compiled by the Librarian.**

The publications announced in this list consist of those on file in the library.

Forest Botany—

- Ohio forest trees; W. A. Kellerman. 16 p. Ohio state university, Columbus, Ohio.
The silva of Colorado; F. Ramaley. Pt. 1-2, 1907. 25 p. Illus. From University of Colorado studies, vol. 4, nos. 2-3.

Silvics—

- Alpine fir; Forest service. 1907. 3 p. Silvical leaflet 1.
Engelmann spruce; Forest service. 1907. 4 p. Silvical leaflet 3.
Incense cedar; Forest service. 1907. 4 p. Silvical leaflet 9.
Port Orford cedar; Forest service. 1907. 3 p. Silvical leaflet 2.
White fir; Forest service. 1907. 4 p. Silvical leaflet 4.

Educational—

- Classified list of publications available for distribution Oct. 1, 1907; Forest service. 4 p.

Forest Management—**Planting—**

- Forest planting in the North Platte and South Platte valleys; F. G. Miller. 1907. 19 p. Circular 109 of the Forest service.

Organization and Administration—

- Field program for October, 1907; Forest service. 23 p.

National and State Forests—

- Location, date of latest proclamation, and area of the national forests in the United States, Alaska, and Porto Rico, Oct. 1, 1907; Forest service. 4 p.
New York.—Forest, fish, and game commission. 11th annual report, 1905. 1906. 212 p. Illus. Albany, N. Y.
New York.—Forest preserve board. 5th report, 1907. 35 p. Albany, N. Y.
Pennsylvania.—Dept. of forestry. Report for 1905 and 1906. 1907. 150 p. Illus. Harrisburg, Pa.

Utilization—

- Use of dead timber in the national forests; E. R. Hodson. 1907. 4 p. Circular 113 of the Forest service.

Forest Products—

- Maple sugar; A. Valin. 1907. 25 p. Bulletin 140 of the Laboratory of the Inland revenue department, Ottawa, Canada.
Maple syrup; A. Valin. 1907. 21 p. Bulletin 141 of the Laboratory of the Inland revenue department, Ottawa, Canada.
Rubber producing capacity of the Philippine Islands; P. L. Sherman and G. P. Ahern. 1907. 44 p. Illus. Bureau of insular affairs, War department.

Utilization—Continued.**Wood preservation—**

- The life and preservation of pitch pine fence posts; B. C. Buffum. 1907. 18 p. Bulletin 75 of the Wyoming agricultural experiment station, Laramie, Wyo.
 Prolonging the life of mine timbers; J. M. Nelson, jr. 1907. 22 p. Illus. Circular 111 of the Forest service.

Statistics—

- Census of manufactures, 1905; paper and wood pulp. 1907. 43 p. Bulletin 80 of the Bureau of the census.
 The waning hardwood supply and the Appalachian forests; W. L. Hall. 1907. 16 p. Circular 116 of the Forest service.

Forest Laws—

- Digest of the game, fish, and forestry laws of Pennsylvania; J. Kalbfus. 1907. 240 p. Harrisburg, Pa.

Street and Park Trees—

- Tenement shade tree committee of the Tree planting association of New York City. Annual report, 1905. 14 p. Illus. N. Y.

Proceedings of Associations—

- Iowa park and forestry association. Proceedings, 1906. 1907. 89 p. Illus. Iowa City, Iowa.

Forest Enemies—**Diseases of Trees—**

- Studies upon some chromogenic fungi which discolor wood; G. G. Hedgcock. 1906. 56 p. Missouri botanical garden, St. Louis, Mo.

Insects—

- Insects affecting park and woodland trees; E. P. Felt. Vol. 1-2, 1905-6. Illus. N. Y. state museum, Albany, N. Y.

Irrigation—

- The Iron Canyon irrigation project, Tehama Co., Cal. 17 p. Illus. Red Bluff chamber of commerce, Red Bluff, Cal.
 Irrigation in northern Italy; E. Mead. Pt. 2, 1907. 86 p. Illus. Bulletin 190 of the Office of experiment stations, U. S. Dept. of agriculture.

Periodicals—Articles of General Interest—

- Transactions of the Massachusetts horticultural society, 1907, pt. 1.—Forestry from a commercial standpoint, by F. W. Rane, p. 89; The planting of streets and waysides, by J. A. Pettigrew, p. 103.
 U. S. daily consular reports, Sept. 16, 1907.—France's forests, by M. B. Kirk, p. 11.
 U. S. daily consular reports, Sept. 28, 1907.—German forest revenues, by W. C. Teichman, p. 7.
 U. S. daily consular reports, Oct. 3, 1907.—Brazilian lumber development, by G. E. Anderson, p. 10.
 U. S. daily consular reports, Oct. 5, 1907.—Wood pulp in Spain, by B. H. Ridgely, p. 13.
 U. S. daily consular reports, Oct. 9, 1907.—Woods of Borneo, by L. Maynard, p. 14.

BRANCH OF OPERATION.**OFFICE OF ACCOUNTS.****Applications for Leave of Absence—**

The attention of supervisors is called to the correct manner of making application for leaves of absence. Requests should be made to the Forester in advance by letter or telegram, but leave slip Form 785 should not be filled out until after the supervisor has returned to duty. It is very essential that these directions be observed, since supervisors are not notified of action taken upon requests submitted upon leave slips only. It is understood that telegrams asking for leave and replies granting leave must be sent at the expense of the supervisor.

Attention is called to the fact that some supervisors have granted to rangers leave without pay in excess of 30 days. Supervisors have authority to grant to rangers and guards 15 days' annual leave with pay and 30 days' leave without pay in any one calendar year. If a furlough of more than 30 days is desired, the matter should be taken up with the Forester. Annual and sick leave and leave without pay, not in excess of 30 days, taken by rangers should be noted on Form 143, and it is not necessary to forward leave slips to this office.

OFFICE OF MAINTENANCE.

Compasses—

The demand for the new standard compass, which has been adopted in lieu of the Brunton and surveyor's compasses, is so great that the manufacturers, even by working their force overtime, are unable to furnish them rapidly enough to fill all requisitions promptly. Partial deliveries are being made from time to time, and it is hoped that all requisitions now in hand will be filled by Novem-

Calendar Pads for 1908—

Calendar pads for 1908 will be forwarded without request to each inspector and supervisor by December 15. Those officers who have not been furnished with frames for holding these pads should make request for them at once.

Requisitions for Supplies—

To each supervisor has been forwarded a list of standard articles of furniture, equipment, and office supplies obtainable from Washington on requisition.

The attention of members of the Service is called to the fact that some articles of furniture and equipment are not complete in themselves. For example, when a camera is requested the requisition should specify whether case, tripod, tripod case, and focusing cloth are also desired. When requesting marking axes, hatchets, or hammers, the number of leather cases desired should be specified.

Two kinds of loose-sheet indexes for section No. 3 of the standard filing-case are furnished. Requisitions for additional sections or for loose-sheet transfer cases should always specify the number and kind of indexes desired.

OFFICE OF LANDS.

Claims—

Supervisors forwarding reports (on Form 4-310a, letter C) to the Forester on claims, based on requests by the Commissioner of the General Land Office and referred to them by the Forester, should be careful in every case to return the Commissioner's letter, attached to the report. There have been frequent omissions to do this on the part of the Forest officers.

The Commissioner of the General Land Office has informed the Forester that he has directed all local land officers to notify supervisors, at their headquarters, of all cancellations of entries, filings, or selections within the limits of National Forests. The registers are instructed to indorse upon all relinquishments of entries within National Forests the date and name of the person to whom the notice is given. The order directs that the notice of cancellation is to be given to supervisors, whether such cancellation results from contest, special agent's report, expiration of statutory period, or other cause.

Because of its importance the attention of Forest officers is again called to the notice appearing in the Field Program for August:

Many inquiries are being received from the General Land Office concerning claims in the National Forests upon which final proof has been made, of which the Forest Service has received no report from the supervisor. Forest officers should forward reports promptly upon any claims they have examined or of which they have received notice that final proof has been offered, so that they may be submitted to the General Land Office with appropriate recommendation. (See Service Order No. 5, Field Program for September, 1907.)

Special Uses—

Supervisors having charge of more than one forest should be careful in designating cases to give the forest in which the land involved is located. Failure to do this causes considerable confusion in the office of the Forester.

Permits, without charge, may be issued by supervisors to grazing permittees for cabins to be used entirely in connection with caring for stock.

No charge will be made for special-use permits granted to persons who are purchasers of timber from the United States in any case where the permit is to be used in connection with the removal of timber so purchased.

Boundaries—

All reports on lands applied for under the act of June 11, 1906, should be forwarded by the examiner to the supervisor of the Forest in which the lands applied for are situated. The supervisor should forward reports to the chief inspector. (See page 7, circular dated July 17, 1907, Agricultural Settlement.) Supervisors and chief inspectors will please be careful to see that this is done, since it frequently happens that reports reach the Forester without having been approved by both the supervisor and the chief inspector.

Applications under Act of June 11, 1906—

Chief inspectors and supervisors will hereafter be sent township plats (Form 974), notifying them of the receipt of new applications under the act of June 11, 1906. This plat will contain the series number of the National Forest, the applicant's name, post-office address, date of receipt of application, and the description of the land as given by the applicant. If the land is surveyed, the legal subdivisions will be indicated upon the township diagram, and if unsurveyed, the location of the areas as described by the applicant will be written on the back of the plat.

Notice of change in applications already of record—as when an application has been amended, withdrawn, or rejected, or the land has been listed—will be promptly furnished the supervisors and chief inspectors by means of carbons of the letters to the applicants.

OFFICE OF ORGANIZATION.

Appointments by Telegraph—

Some supervisors are not observing the instructions given in the circular letter of September 10 concerning confirmation, by mail, of telegrams giving names of persons recommended for appointment. In order that there may be no failure to mail to the Forester a copy of every telegram of this character, supervisors

are requested to add to all such telegrams the word "confirmed." The Forester will understand from this that a copy of the telegram is being mailed. So many mistakes in names have occurred in telegrams that it is found necessary to await confirmation by mail before recommendation for appointment is made to the Secretary of Agriculture.

Proclamation and Boundary Diagrams—

Supervisors should understand that they can secure at any time additional copies of proclamations or boundary diagrams upon request to the Forester. In a great many cases boundary diagrams are better than proclamations for distribution among users of the Forests.

Acknowledgment of Fire Warnings—

Upon a good many Forests settlers have rendered and are rendering signal service by reporting fires, fighting fires, and in other ways. In such cases it would be a graceful and a helpful thing if letters of thanks could go to these men from the Forester. Supervisors are requested to bear this in mind and to make report in cases where they think such action should be taken.

Flags for District Rangers—

Supervisors should see that flags are furnished all district rangers and that these flags are hoisted whenever the ranger is at home. Additional flags for this purpose will be furnished upon requisition to the Forester.

Books for Information of Forest Users—

Rangers should in a good many cases be furnished by supervisors with a supply of Use Books and Red Books for distribution among the users of the Forest residing in and near the rangers' districts. Additional supplies of these will be sent supervisors upon requisition.

Rangers' Drafting Tables—

Specifications and plans have been prepared for the construction of a table for the use of rangers. It is very desirable that all permanent ranger quarters be equipped with tables for drafting and other office work, and these specifications have been prepared and blueprinted with a view to aiding supervisors as much as possible in attaining this end.

Where new quarters are planned it may be found desirable to include in the bill of material lumber for a table and thus lessen the cost. Copies of these plans and specifications will be sent to supervisors upon request, and they are urged to push the matter vigorously. Where a number of tables are needed on a single Forest, it may be advisable in some cases to let a contract to a local carpenter. Bids are not required unless the amount involved exceeds \$50.

Permanent Ranger Districts—

Permanent ranger districts should be established as rapidly as possible and the same ranger kept on the same district as far as this is practicable. Upon some forests there is a tendency to waive the district scheme and to assign rangers to specific lines of work rather than to specific localities. This practice should be avoided.

United States Department of Agriculture,

FOREST SERVICE.

GIFFORD PINCHOT, Forester.

FIELD PROGRAM FOR DECEMBER, 1907.

This program of field work and assignments in the Forest Service is issued monthly. The names of members whose assignments are not yet fixed, and reference to projects for which plans have not been matured, are necessarily omitted.

It is requested that the members of the Forest Service cooperate in making this program complete and accurate. Information concerning errors or omissions, and changes of project or of address for the following month, should be sent by members to the offices of their respective chiefs not later than the 20th of the month.

Unless the address of a member is given in this program or is definitely known, he should be addressed in care of the Forest Service, Washington, D. C.

OFFICE OF THE FORESTER.

GIFFORD PINCHOT, Forester.

OVERTON W. PRICE, Associate Forester.

HARRY L. HILL, Secretary to the Forester.

P. P. WELLS, Law Officer.

A. C. SHAW, Principal Examiner.

HERBERT A. SMITH, Editor.

GEORGE B. SUDWORTH, Dendrologist.

INSPECTION.

FORESTER AND ASSOCIATE FORESTER.

Inspection District 1.—Montana, Northern Idaho, and Northern Wyoming.

E. A. SHERMAN, Chief Inspector, Missoula, Mont.

Inspector: **P. G. REDINGTON, Missoula, Mont.**

Inspection District 2.—Colorado, Southern Wyoming, South Dakota, Nebraska, Kansas, Southeastern Montana, and Southeastern Utah.

SMITH RILEY, Chief Inspector, Denver, Colo.

Inspectors: **R. P. IMES** and **F. W. MORRELL, Denver, Colo.**; **T. D. WOODBURY, Washington, D. C.**

Inspection District 3.—Arizona, New Mexico, and Oklahoma.

D. D. BRONSON, Chief Inspector, Albuquerque, N. Mex.

Inspectors: **T. S. WOOLSEY, Jr., W. R. MATTOON,** and **A. O. WAHA,** all at Albuquerque, N. Mex.

Inspection District 4.—Utah, Southern Idaho, Western Wyoming, Eastern Nevada, and Northern Arizona.

R. E. BENEDICT, Chief Inspector, Salt Lake City, Utah.

Inspectors: F. W. REED, J. M. FETHEROLF, and L. L. WHITE, all at Salt Lake City, Utah.

Inspection District 5.—California and Western Nevada.

F. E. OLMSTED, Chief Inspector, San Francisco, Cal.

Inspectors: COERT DU BOIS, J. H. HATTON, WM. C. HODGE, Jr., G. W. PEAVY, S. J. FLINTHAM, and J. K. CAMPBELL, all at San Francisco, Cal.

Inspection District 6.—Washington, Oregon, and Alaska.

E. T. ALLEN, Chief Inspector, Portland, Oreg.

Inspectors: M. L. ERICKSON, W. H. B. KENT, and F. E. AMES, all at Portland, Oreg.

White Mountain and Appalachian Investigation: WM. L. HALL, *Assistant Forester*, in Charge; assistant, A. K. CHITTENDEN.

E. S. BRUCE, Expert Lumberman and Special Inspector, in the Office of the Forester.

BRANCH OF SILVICULTURE.

WILLIAM T. COX, Assistant Forester, in Charge.

OFFICE OF MANAGEMENT.

E. E. CARTER, Chief.

W. G. WEIGLE, Assistant Chief.

Timber Sales, **E. H. CLAPP, Chief.**

G. M. HOMANS, Assistant Chief.

Timber Sale Correspondence.

Districts 1 and 4—D. C. A. GALARNEAU.

District 2—ZEPH JONES.

District 3—A. B. RECKNAGEL.

District 5—I. F. ELDRIDGE.

District 6—G. P. BARD.

FRED LEES—Trespass.

Temporary assignments for work on important sales under the direction of supervisors:

W. T. ANDREWS, Lumberman, Boise, Idaho.

J. S. BAIRD, Lumberman, Cass Lake, Minn.

M. BURNS, Lumberman, Cass Lake, Minn.

W. D. CLARK, Agent, Clearwater, Mont.

GEO. L. COTT, Lumberman, Safford, Ariz.

NILS ECKBO, Forest Agent, Newport, Wash.

GEO. P. GREGG, Lumberman, Keystone, Wyo.

P. T. HARRIS, Forest Assistant, Helena, Mont.

C. S. JUDD, Forest Assistant, Beckwith, Cal.

W. E. LA FOUNTAIN, Kalispell, Mont.

D. T. MASON, Forest Assistant, Durango, Colo.

W. R. MCKINNON, Lumberman, Cass Lake, Minn.

A. J. NORTON, Lumberman, Kalispell, Mont.

J. F. PRESTON, Forest Assistant, Neihart, Mont.

J. D. WARNER, Forest Assistant, Wallace, Idaho.

Reconnaissance, S. J. RECORD.

Washington—

Working plan for Chelan Basin—MAX ROTHKUGEL, Chelan.

Cooperation, J. S. HOLMES, Acting.

PROJECTS.

Eastern States—

Timberland examinations—W. D. STERRETT, Washington, D. C.

Kentucky—

Preparation of report on forest conditions—WESLEY BRADFELD, R. G. POND, and MAX PFAENDER, Washington, D. C.

Mississippi—

Study of forest conditions in cooperation with the State Geological Survey—J. S. HOLMES and J. H. FOSTER, Jackson.

Montana—

Study of forest conditions in cooperation with the Northern Pacific Railroad Company—KARL W. WOODWARD, in charge, Ovando, Mont.; assistants, S. L. MOORE, J. ST. J. BENEDICT, L. S. MURPHY, R. M. MACMURRAY, F. TOMPKINS, W. B. PIPER, W. S. UHLER, and G. E. SAWYER, Kalispell.

Maine—

Forest conditions—AUSTIN CARY, Brunswick.

New Mexico—

Supervision of cutting, Fort Wingate Military Reservation, in cooperation with the War Department—NELSON LE GRAND, Guam, N. Mex.

Wisconsin—

Working plans for timber sales on Indian reservations, in cooperation with the State and U. S. Indian Office—E. M. GRIFFITH, State Forester, Madison; assistant, J. A. HOWARTH, Jr., Ashland.

Forest Atlas, F. G. PLUMMER, Point Loma, Cal.

OFFICE OF SILVICS.

RAPHAEL ZON, Chief.

Field Studies, RAPHAEL ZON.

PROJECTS.

Colorado—

Location and estimate of timber infested by the Black Hills beetle, the Engelmann spruce beetle, the Douglas fir beetle, etc., in Colorado National Forests, and investigation of the facilities for barking the standing timber or disposing of it, in cooperation with the Bureau of Entomology (forest insect investigations, A. D. Hopkins, in charge)—W. D. EDMONSTON, Colorado Springs, Colo.

Eastern States—

Study of second growth yellow poplar—W. W. ASHE, Washington, D. C.

Study of the hickories—A. T. BOISEN; assistant, C. G. BATES, Washington, D. C.

Montana—

Study of cut-over areas of lodgepole pine—E. R. HODSON, Washington, D. C.

Northeastern States—

Study of the birches—S. T. DANA, 395 Spring street, Portland, Me.

New England—

Study of the white pine disease, its extent, amount of damage caused, and practical measures for preventing its spread, in cooperation with the Division of Forest Pathology—S. T. DANA, 395 Spring street, Portland, Me.

Rocky Mountain States—

Study of Douglas fir, with special reference to its growth, volume, and reproduction—E. H. FROTHINGHAM, Washington, D. C.

Location of insect-infested timber in the Grand Canyon National Forest, and investigation of facilities for removing standing timber; in cooperation with the Bureau of Entomology (forest insect investigations, Dr. A. D. HOPKINS in charge)—MORRIS CHRISMAN, Benson, Ariz.

Library, H. E. STOCKBRIDGE.

Compilation, E. H. FROTHINGHAM.

OFFICE OF EXTENSION.**SAMUEL N. SPRING, Chief.****Planting, L. C. MILLER.**

Preparation and revision of plans for planting stations—J. F. KÜMMEL, Washington, D. C.

Preparation of reports on seed collecting—G. B. MACDONALD, Washington, D. C.

Preparation of reports on seed collecting and commercial nurseries—WM. H. MAST, Washington, D. C.

Reconnaissance, W. H. VON BAYER.**PROJECTS.**

Preparation of plans for experimental planting on National Forests—W. H. VON BAYER, Washington, D. C.

Cooperation, A. S. PECK, Acting.**PROJECTS.**

Compilation of data on cooperative planting—C. A. KÜPFER, Washington, D. C.

Hawaii—

Experimental planting—R. S. HOSMER, Collaborator, Honolulu.

Mississippi—

Experimental planting—G. L. CLOTHIER, Collaborator, Agricultural College.

Nebraska—

Experimental planting—F. J. PHILLIPS, Collaborator, Lincoln.

BRANCH OF GRAZING.**A. F. POTTER, Assistant Forester, in Charge.****OFFICE OF CONTROL.****WILL C. BARNES, Acting Chief.**

Allotment, WILL C. BARNES.

Adjustment, L. F. KNEIPP (in the Field).

Permits, Miss ANNA P. KOSCHWITZ.

OFFICE OF DEVELOPMENT.**C. H. ADAMS, Acting Chief.**

Fences, C. H. ADAMS.

Forage, W. C. CLOS (in the Field).

Water, J. K. CAMPBELL (in the Field).

PROJECTS.

Forage investigations; compilation of data—F. V. COVILLE, Botanist, Bureau of Plant Industry, in charge, Washington, D. C.; JAMES T. JARDINE, Expert, Washington, D. C.; ARTHUR T. SAMPSON, Expert, Washington, D. C.; G. A. PEARSON, Forest Assistant, Washington, D. C.

Poisonous plant investigations—Prof. C. D. MARSH, Expert, Bureau of Plant Industry, in charge, Hugo, Colo.; IVAR TIDESTROM, Scientific Assistant, Washington, D. C.

BRANCH OF PRODUCTS.

WM. L. HALL, Assistant Forester, in Charge.

OFFICE OF WOOD UTILIZATION.

R. S. KELLOGG, Chief.

Computing, E. A. ZIEGLER.

Drafting, C. A. KOLB.

Wood Chemistry, H. S. BRISTOL

Wood Uses, M. CLINE.

PROJECTS.

California—

Tests of the strength of eucalyptus, redwood, and tanbark oak, in cooperation with the University of California and the Northwestern Redwood Company—L. E. HUNT, Berkeley; assistant, A. L. HEIM.

Connecticut—

Timber tests, with special reference to the influence of method of drying on the strength of timber, in cooperation with Yale University—H. D. TIEMANN, Yale Station, New Haven; assistants, H. E. MCKENZIE and CORNELIUS BARRY.

Florida—

Turpentine orcharding experiments—P. D. EDMUNDS, Green Cove Springs.

Indiana—

Tests of structural timbers, in cooperation with Purdue University—W. K. HATT, Lafayette; assistants, J. A. NEWLIN and J. O. BIXBY.

Washington—

Tests of western hemlock and National Forest woods, in cooperation with the University of Washington—O. P. M. GOSS, University Station, Seattle; assistant, G. R. GESSERT.

General Studies—

Washington office, timber tests—H. S. BETTS, in charge; assistant, T. W. VENEMANN.

Design of impact testing machine—ROLF THIELEN, Washington, D. C.

Properties and utilization of Douglas fir—J. B. KNAPP, Washington, D. C.

Collection of statistics of forest products, in cooperation with the Bureau of the Census—W. B. BARROWS, Washington, D. C.; GEORGE K. SMITH, Lumbermen's Building, St. Louis, Mo.

Study of commercial processes of wood distillation—L. F. HAWLEY, Washington, D. C.

Study of chemical problems in wood utilization—ERNEST BATEMAN and E. SUTERMEISTER, Washington, D. C.; A. L. DEAN, 93 Broad street, Boston, Mass.

Studies in the heat conductivity of wood—FREDERICK DUNLAP, Washington, D. C.

Study of markets for forest products—H. M. HALE, Washington, D. C.

Study of National Forest woods—H. B. HOLROYD, Washington, D. C.

Study of the uses of western hardwoods—H. S. SACKETT, Washington, D. C.

OFFICE OF WOOD PRESERVATION.

CARL G. CRAWFORD, Chief.

PROJECTS.

California—

Experiments in seasoning and treating telephone and other poles for electric wires, in cooperation with electric companies in southern California—W. R. WHEATON, Hotel Woodward, Los Angeles; assistants, O. T. SWAN, Hotel Sequoia, Fresno, and W. H. KEMPFER, 212 South Grand avenue, Los Angeles.

Connecticut—

Experiments to ascertain the effects of live steam and vacuum as ordinarily used at commercial treating plants on the moisture content and absorptive qualities of different kinds of wood—C. STOWELL SMITH, Yale Forest School, New Haven.

Louisiana—

Experiments to devise a system for treating the products of southern lumber mills, in cooperation with the Great Southern Lumber Company—H. F. WEISS, Bogalusa.

Pennsylvania—

Experiments in treating mine timbers, in cooperation with the Philadelphia and Reading Coal and Iron Company—JOHN M. NELSON, Jr., care Philadelphia and Reading Coal and Iron Company, Pottsville.

Wisconsin—

The laying of an experimental track with hemlock and tamarack cross-ties to test the value of seasoning and treating, and of various devices for reducing the mechanical wear of the rails; in cooperation with the Chicago and Northwestern Railway Company—H. A. PAUL, Myers Hotel, Janesville.

General Studies—

Correlation of data on the preservative treatment of American and foreign woods—M. C. JENSEN, Washington, D. C.

OFFICE OF PUBLICATION.

FINDLEY BURNS, Chief.

Articles, T. CLEVELAND, Jr.
Review, FINDLEY BURNS.
Printing, QUINCY R. CRAFT.

Distribution, BRISTOW ADAMS.
Education, H. A. WINKENWERDER.

PUBLICATIONS IN NOVEMBER.

Circular 61 (Revised Edition). How to Transplant Forest Trees.
Circular 114. Wood Distillation.
Circular 119. Consumption of Tanbark and Tanning Extract in 1906.
Circular 120. Consumption of Pulpwood in 1906.
Circular 126. Forest Tables—Lodgepole Pine.
Circular 129. The Drain Upon the Forests.
Circular (unnumbered). Suggestions for the Disposal of Brush in the National Forests.
Silvical Leaflet 7. Noble Fir.
Silvical Leaflet 8. Red Fir (*Abies magnifica*).
Silvical Leaflet 9. Incense Cedar.
Silvical Leaflet 10. Bigcone Spruce.
Silvical Leaflet 11. Giant Arborvitæ.
Silvical Leaflet 13. Western White Pine.
Silvical Leaflet 14. Western Larch.

BRANCH OF OPERATION.

JAMES B. ADAMS, Assistant Forester (in the Field).
CHAS. S. CHAPMAN, in Charge.
GEO. G. ANDERSON, Assistant in Office Methods.

OFFICE OF ACCOUNTS.

GEORGE E. KING, Fiscal Agent and Chief.

Disbursing, E. A. MELZAR.
Bookkeeping, O. H. TIBBOTT.

Appointments, Miss FLORENCE D. STRAUSE.
Receipts, Miss MARY R. LATIMER.

OFFICE OF MAINTENANCE.

HERMON C. METCALF, Chief.

Purchase, H. C. TOWERS.
Record, H. C. METCALF.
Supplies, A. M. SMITH.

Photography, A. G. VARELA.
Property Auditor, J. G. FALCK.

OFFICE OF LANDS.

GEORGE F. POLLOCK, Chief.

Special Uses, M. J. McVEAN (in the Field).

C. H. SQUIRE, Acting.

Claims, F. L. HARVEY.

Settlement, A. C. RINGLAND, Acting.
Status, J. B. SATTERLEE.

Boundaries, H. O. STABLER, Acting.

OFFICE OF ENGINEERING.

W. E. HERRING, Chief.

F. W. CATER, care Supervisor Spencer, Monte Vista, Colo.

E. H. DARLING, care Supervisor Bartrum, Roseburg, Oreg.

T. L. DAY, care Supervisor Sherrard, Denver, Colo.

W. N. HALL, care Supervisor Snow, Moab, Utah.

E. R. HARRISON, care Supervisor Grandjean, Boise, Idaho.

A. L. HERRING, care Supervisor Thurston, Cody, Wyo.

NILE HUGHES, care Supervisor Shaw, Durango, Colo.

E. H. JONES, care Supervisor Allen, Orting, Wash.

F. E. JOY, care Supervisor Russell, Livingston, Mont.

E. W. KRAMER, care Supervisor McMillan, Santa Fe, N. Mex.

E. E. LESLIE, care Supervisor Blair, Meeker, Colo.

J. P. MARTIN, care Supervisor Bigelow, Yreka, Cal.

R. E. MESNARD, care Acting Supervisor Headley, Thompson Falls, Mont.

A. T. MITCHELSON, care Supervisor Shaw, Durango, Colo.

W. C. NESPITAL, Washington, D. C.

F. C. WALES, care Supervisor Bentz, Salmon, Idaho.

J. Y. WORK, care Supervisor Anderson, Grants Pass, Oreg.

OFFICE OF ORGANIZATION.

CHAS. S. CHAPMAN, Chief.

CLYDE LEAVITT, Assistant Chief (in the Field).

GEO. H. CECIL, Acting.

DORR SKEELS, Forest Assistant, District 1.

T. D. WOODBURY, Inspector, District 2.

R. C. McCLURE, Forest Supervisor, District 3.

HOMER E. FENN, Forest Supervisor, District 4.

L. A. BARRETT, Forest Supervisor, District 5.

A. E. COHOON, Deputy Forest Supervisor, District 6.

M. B. PRATT, Forest Assistant (Special Detail).

S. J. RECORD, Forest Assistant (Special Detail).

NATIONAL FORESTS.

(Numerals following National Forests indicate Inspection Districts.)

ALASKA.

Alexander Archipelago—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)

Afognak—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)

Chugach—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)

Tongass—W. A. LANGILLE, Forest Supervisor, Ketchikan. (6)

ARIZONA.

Baboquivari—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)

Black Mesa (N.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)

Black Mesa (S.)—DRAYTON C. MARTIN, Acting Forest Supervisor, Clifton. (3)

Chiricahua—C. T. MCGLONE, Forest Supervisor, Douglas; H. D. BURRALL, Forest Assistant. (3)

Dragoon—ROBERT J. SELKIRK, Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant.

Grand Canyon (N.)—R. E. BENEDICT, Acting Forest Supervisor, Kanab, Utah; LORUM PRATT, Deputy Forest Supervisor. (4)

Grand Canyon (S.)—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON, Forest Assistant; WILLARD M. DRAKE, Forest Assistant. (3)

Huachuca—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)

Mount Graham—THEODORE T. SWIFT, Acting Forest Supervisor, Safford. (3)
Pinal Mountains—THEODORE T. SWIFT, Acting Forest Supervisor, Safford. (3)
Prescott—F. C. W. POOLER, Forest Supervisor, Prescott. (3)
San Francisco Mountains—F. S. BREEN, Forest Supervisor, Flagstaff; J. H. ALLISON and WILLARD M. DRAKE, Forest Assistants. (3)
Santa Catalina—ROBERT J. SELKIRK, Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant. (3)
Santa Rita—ROBERT J. SELKIRK, Forest Supervisor, Benson; H. D. BURRALL, Forest Assistant. (3)
Tonto—W. H. REED, Forest Supervisor, Roosevelt. (3)
Tumacacori—ROSCOE G. WILLSON, Acting Forest Supervisor, Nogales. (3)

CALIFORNIA.

Diamond Mountain—L. A. H. KLING, Acting Forest Supervisor, Quincy. (5)
Inyo—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Klamath—R. L. P. BIGELOW, Forest Supervisor, Yreka. (5)
Lassen Peak—L. A. H. KLING, Acting Forest Supervisor, Quincy. (5)
Modoc—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)
Monterey—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Pinnacles—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
Plumas—L. A. H. KLING, Acting Forest Supervisor, Quincy. (5)
San Benito—N. O. TORSTENSON, Forest Supervisor, Salinas. (5)
San Bernardino—R. H. CHARLTON, Forest Supervisor, Los Angeles. (5)
San Gabriel—R. H. CHARLTON, Forest Supervisor, Los Angeles; Pasadena Planting Station—E. C. CLIFFORD, Pasadena; SEROPE Y. PARNAY, Forest Expert. (5)
San Jacinto—H. A. E. MARSHALL, Forest Supervisor, Hemet. (5)
San Luis Obispo—E. S. MAINWARING, Forest Supervisor, San Luis Obispo. (5)
Santa Barbara—WILLIS M. SLOSSON, Forest Supervisor, Santa Barbara; H. G. MERRILL, Forest Assistant; San Marcos Planting Station—B. R. H. D'ALLEMAND; Assistant, H. C. MUZZALL, Santa Barbara. (5)
Shasta—G. A. COLEMAN, Forest Supervisor, Sisson; R. F. HAMMATT, Forest Assistant. (5)
Sierra (N.)—CHARLES H. SHINN, Forest Supervisor, Northfork; H. J. TOMPKINS, Forest Assistant. (5)
Sierra (S.)—WILLIAM B. GREELEY, Forest Supervisor, Hot Springs; W. M. MAULE, F. B. KELLOGG, D. N. ROGERS, and C. M. GRANGER, Forest Assistants. (5)
Sierra (E.)—A. H. HOGUE, Forest Supervisor, Bishop. (5)
Stanislaus—S. L. N. ELLIS, Forest Supervisor, Sonora; R. W. AYRES, Forest Assistant. (5)
Stony Creek—ERNEST BRITTEN, Acting Forest Supervisor, Elk Creek. (5)
Tahoe—MADISON B. ELLIOTT, Forest Supervisor, Nevada City. (5)
Trabuco Canyon—H. A. E. MARSHALL, Forest Supervisor, Hemet. (5).
Trinity—F. H. HAFLEY, Forest Supervisor, Weaverville. (5)
Warner Mountains—C. E. RACHFORD, Acting Forest Supervisor, Alturas. (5)

COLORADO.

Battlement Mesa—DAVID ANDERSON, Forest Supervisor, Collbran. (2)
Cochetopa—EUGENE WILLIAMS, Forest Supervisor, Saguache. (2)
Fruita—H. K. PORTER, Forest Supervisor, Delta; J. H. RAMSKILL, Forest Assistant. (2)
Gunnison—WM. R. KREUTZER, Forest Supervisor, Gunnison; E. C. BERKY, Deputy Forest Supervisor. (2)
Holy Cross—HARRY H. FRENCH, Forest Supervisor, Glenwood Springs; SWIFT BERRY, Forest Assistant. (2)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab, Utah. (2)
Las Animas—D. E. FITTON, Acting Forest Supervisor, La Veta. (2)
Leadville—A. L. STROUP, Forest Supervisor, Leadville; J. F. BRUINS, Forest Assistant. (2)
Medicine Bow (Colo. Div.)—HERBERT N. WHEELER, Forest Supervisor, Estes Park. (2)
Montezuma—ERNEST W. SHAW, Forest Supervisor, Durango. (2)
Ouray—H. K. PORTER, Acting Forest Supervisor, Delta; J. H. RAMSKILL, Forest Assistant. (2)
Park Range—THOMAS HOGAN, Forest Supervisor, Steamboat Springs. (2)
Pikes Peak—THOS. H. SHERRARD, Forest Supervisor, Denver; W. J. MORRILL, Forest Assistant. (2)
San Isabel—C. J. STAHL, Acting Forest Supervisor, Westcliffe. (2)

San Juan—F. C. SPENCER, Forest Supervisor, Monte Vista; A. A. PARKER, Deputy Forest Supervisor; P. T. COOLIDGE, Forest Assistant. (2)
Uncompahgre—H. K. PORTER, Forest Supervisor, Delta; J. H. RAMSKILL, Forest Assistant. (2)
Wet Mountains—C. J. STAHL, Acting Forest Supervisor, West Cliffe. (2)
White River—JAMES A. BLAIR, Forest Supervisor, Meeker. (2)

IDAHO.

Bear River—W. W. CLARK, Forest Supervisor, Logan, Utah; J. F. SQUIRES, Deputy Forest Supervisor. (4)
Big Hole (S.)—J. B. SEELY, Forest Supervisor, Sheridan, Mont. (1)
Bitter Root—F. A. FENN, Forest Supervisor, Kooskia. (1)
Cabinet (N.)—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
Caribou—J. T. WEDEMEYER, Forest Supervisor, Idaho Falls. (4)
Cassia—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Coeur d'Alene—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; J. E. BARTON, Deputy Forest Supervisor. (1)
Henrys Lake—FOSTER STEELE, Acting Forest Supervisor, St. Anthony; A. D. READ, Forest Assistant. (4)
Kootenai—D. G. KINNEY, Forest Supervisor, Libby, Mont. (1)
Lemhi (N.)—GEORGE G. BENTZ, Forest Supervisor, Salmon City. (4)
Lemhi (S.)—GUY B. MAINS, Forest Supervisor, Mackay. (4)
Palouse—RICHARD H. RUTLEDGE, Forest Supervisor, Wallace; J. E. BARTON, Deputy Forest Supervisor. (1)
Payette—EMIL GRANDJEAN, Forest Supervisor, Boise; O. M. BUTLER, Forest Assistant. (4)
Pocatello—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Port Neuf—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Priest River—R. L. FROMME, Acting Forest Supervisor, Newport, Wash. (1)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello. (4)
Salmon River—GEORGE G. BENTZ, Forest Supervisor, Salmon City. (4)
Sawtooth—EMIL GRANDJEAN, Forest Supervisor, Boise; O. M. BUTLER, Forest Assistant. (4)
Weiser—J. B. LAFFERTY, Forest Supervisor, Weiser; WALTER M. CAMPBELL, Deputy Forest Supervisor; C. G. SMITH, Forest Assistant. (4)
Yellowstone (Idaho Div.)—FOSTER STEELE, Acting Forest Supervisor, St. Anthony; A. D. READ, Forest Assistant. (4)

KANSAS.

Garden City—CHARLES A. SCOTT, Forest Supervisor, Halsey, Nebr. (2)

MINNESOTA.

Minnesota—G. E. MARSHALL, Forest Supervisor, Cass Lake. (2)

MONTANA.

Big Belt—R. W. STUART, Forest Supervisor, Townsend. (1)
Big Hole (Anaconda Div.)—CHARLES C. HALL, Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
Big Hole (N.)—C. K. WYMAN, Forest Supervisor, Dillon; ROBT. J. MOORE, Deputy Forest Supervisor. (1)
Big Hole (S.)—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Bitter Root (Montana Div.)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor; K. R. MCGUFFEY, Forest Assistant. (1)
Cabinet (N.)—D. G. KINNEY, Forest Supervisor, Libby. (1)
Cabinet (S.)—ROY HEADLEY, Acting Forest Supervisor, Thompson Falls. (1)
Crazy Mountains—E. C. RUSSELL, Forest Supervisor, Livingston. (1)
Ekalaka—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Elkhorn—R. W. STUART, Forest Supervisor, Townsend. (1)
Gallatin—DAVID CONKLING, Forest Supervisor, Bozeman. (1)
Helena—DWIGHT BUSHNELL, Forest Supervisor, Helena; M. N. STICKNEY, Forest Assistant. (1)
Hell Gate (E.)—CHARLES C. HALL, Forest Supervisor, Anaconda; P. S. LOVEJOY, Forest Assistant. (1)
Hell Gate (W.)—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor; K. R. MCGUFFEY, Forest Assistant. (1)
Highwood Mountains—JAMES G. THAIN, Forest Supervisor, Highwood. (1)

Kootenai—D. G. KINNEY, Forest Supervisor, Libby. (1)
Lewis and Clark (N.)—F. N. HAINES, Forest Supervisor, Kalispell. (1)
Lewis and Clark (S.)—PAGE S. BUNKER, Forest Supervisor, Kalispell. (1)
Little Belt—P. G. REDINGTON, Acting Forest Supervisor, Neihart. (1)
Little Rockies—JAMES G. THAIN, Forest Supervisor, Highwood. (1)
Lolo—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor; K. R. MCGUFFEY, Forest Assistant. (1)
Long Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook, S. Dak. (2)
Madison—J. B. SEELY, Forest Supervisor, Sheridan. (1)
Missoula—ELERS KOCH, Forest Supervisor, Missoula; W. W. WHITE, Deputy Forest Supervisor; K. R. MCGUFFEY, Forest Assistant. (1)
Otter—A. C. MCCAIN, Acting Forest Supervisor, Ashland. (1)
Pryor Mountains—H. W. THURSTON, Forest Supervisor, Cody, Wyo. (1)
Snowy Mountains—P. G. REDINGTON, Acting Forest Supervisor, Neihart. (1)
Yellowstone (Absaroka Div.)—E. C. RUSSELL, Forest Supervisor, Livingston. (1)

NEBRASKA.

Dismal River—C. A. SCOTT, Forest Supervisor, Halsey. Halsey Planting Station—W. H. MAST. (2)
Niobrara—C. A. SCOTT, Forest Supervisor, Halsey. (2)
North Platte—C. A. SCOTT, Forest Supervisor, Halsey. (2)

NEVADA.

Charleston—HARRY E. MATHEWS, Acting Forest Supervisor, Las Vegas. (4)
Independence—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Monitor—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)
Ruby Mountains—CLARENCE N. WOODS, Acting Forest Supervisor, Elko. (4)
Tahoe—M. B. ELLIOTT, Forest Supervisor, Nevada City, Cal.; M. B. PRATT, Forest Assistant. (5)
Toiyabe—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)
Toiyabe—MARK G. WOODRUFF, Forest Supervisor, Austin; DAVID BARNETT, Deputy Forest Supervisor. (4)

NEW MEXICO.

Big Burros—W. H. GODDARD, Acting Forest Supervisor, Silver City; DOUGLAS RODMAN, Forest Assistant. (3)
Gallinas—J. H. KINNEY, Forest Supervisor, Capitan. (3)
Gila (N.)—JOHN KERR, Forest Supervisor, Magdalena; R. F. BALTHIS, Forest Assistant. (3)
Gila (S.)—W. H. GODDARD, Acting Forest Supervisor, Silver City; DOUGLAS RODMAN, Forest Assistant. Fort Bayard Planting Station—W. B. HADLEY, Forest Assistant, Fort Bayard. (3)
Guadalupe—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JAMES, Forest Assistant. (3)
Jemez—ROSS McMILLAN, Forest Supervisor, Santa Fe; ELWOOD I. TERRY, Forest Assistant. (3)
Lincoln—J. H. KINNEY, Forest Supervisor, Capitan. Fort Stanton Planting Station—H. C. TURNER, Fort Stanton. (3)
Magdalena—JOHN KERR, Forest Supervisor, Magdalena; R. F. BALTHIS, Forest Assistant. (3)
Manzano—HUGH H. HARRIS, Forest Supervisor, Albuquerque. (3)
Mount Taylor—HUGH H. HARRIS, Forest Supervisor, Albuquerque. (3)
Pecos River—ROSS McMILLAN, Forest Supervisor, Santa Fe; ELWOOD I. TERRY, Forest Assistant. Las Gallinas Planting Station—W. D. HAYES, East Las Vegas. (3)
Peloncillo—C. T. MCGLOONE, Forest Supervisor, Douglas, Ariz.; H. D. BURRALL, Forest Assistant. (3)
Sacramento—CHARLES H. HINDERER, Acting Forest Supervisor, Alamogordo; L. L. JAMES, Forest Assistant. (3)
San Mateo—JOHN KERR, Forest Supervisor, Magdalena; R. F. BALTHIS, Forest Assistant. (3)
Taos—ROSS McMILLAN, Forest Supervisor, Santa Fe; ELWOOD I. TERRY, Forest Assistant. (3)

OKLAHOMA.

Wichita—W. R. MATTOON, Acting Forest Supervisor, Cache. (3)

OREGON.

- Ashland**—M. J. ANDERSON, Forest Supervisor, Grants Pass; HUGH M. GUTHRIE, Deputy Forest Supervisor; N. F. MACDUFF, Forest Assistant. (6)
Blue Mountains (E.)—HENRY IRELAND, Forest Supervisor, Sumpter. (6)
Blue Mountains (W.)—A. S. IRELAND, Forest Supervisor, Prineville; CY. J. BINGHAM, Deputy Forest Supervisor. (6)
Bull Run—R. B. WILSON, Forest Supervisor, Portland. (6)
Cascade (N.)—R. B. WILSON, Forest Supervisor, Portland. (6)
Cascade (S.)—S. C. BARTRUM, Forest Supervisor, Roseburg. (6)
Coquille—M. J. ANDERSON, Forest Supervisor, Grants Pass; HUGH M. GUTHRIE, Deputy Forest Supervisor; N. F. MACDUFF, Forest Assistant. (6)
Fremont—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
Goose Lake—GUY M. INGRAM, Forest Supervisor, Lakeview. (6)
Heppner—THOMAS E. CHIDSEY, Forest Supervisor, Heppner. (6)
Imnaha—HOWARD K. O'BRIEN, Forest Supervisor, Wallowa; HARVEY W. HARRIS, Deputy Forest Supervisor. (6)
Siskiyou—M. J. ANDERSON, Forest Supervisor, Grants Pass; HUGH M. GUTHRIE, Deputy Forest Supervisor; N. F. MACDUFF, Forest Assistant. (6)
Tillamook—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Umpqua—C. R. SEITZ, Forest Supervisor, Eugene. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla, Wash. (6)

SOUTH DAKOTA.

- Black Hills**—E. M. HAMILTON, Acting Forest Supervisor, Deadwood; ARTHUR L. LYNN, Deputy Forest Supervisor; H. C. NEEL and JOHN MURDOCH, JR., Forest Assistants. (2)
Cave Hills—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Short Pine—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)
Slim Buttes—C. A. BALLINGER, Acting Forest Supervisor, Camp Crook. (2)

UTAH.

- Aquarius**—GEORGE H. BARNEY, Forest Supervisor, Escalante. (4)
Bear River—W. W. CLARK, Forest Supervisor, Logan; J. F. SQUIRES, Deputy Supervisor. (4)
Beaver—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Dixie—CHARLES G. Y. HIGGINS, Forest Supervisor, St. George. (4)
Fillmore—WILLIAM HURST, Forest Supervisor, Beaver. (4)
Fish Lake—N. E. SNELL, Forest Supervisor, Salina. (4)
Glenwood—N. E. SNELL, Forest Supervisor, Salina. (4)
Grantsville—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
La Sal—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Manti—A. W. JENSEN, Forest Supervisor, Ephraim. (4)
Monticello—ORRIN C. SNOW, Forest Supervisor, Moab. (2)
Payson—DAN S. PACK, Forest Supervisor, Payson. (4)
Raft River—P. T. WRENSTED, Forest Supervisor, Pocatello, Idaho. (4)
Salt Lake—E. H. CLARKE, Forest Supervisor, Salt Lake City; Wasatch Planting Station—N. J. FETHEROLF. (4)
Sevier—TIMOTHY C. HOYT, Forest Supervisor, Panguitch. (4)
Uinta—WILLARD I. PACK, Forest Supervisor, Provo; D. S. MARSHALL, Deputy Forest Supervisor; WM. M. ANDERSON, Deputy Forest Supervisor. (4)
Vernon—C. F. COOLEY, Forest Supervisor, Grantsville. (4)
Wasatch—E. H. CLARKE, Forest Supervisor, Salt Lake City. (4)

WASHINGTON.

- Colville**—W. W. CRYDER, Forest Supervisor, Republic. (6)
Olympic—FRED HANSON, Forest Supervisor, Hoodspert. (6)
Priest River—R. L. FROMME, Acting Forest Supervisor, Newport. (1)
Rainier—G. F. ALLEN, Forest Supervisor, Orting. (6)
Washington (Chelan Div.)—G. W. MILHAM, Forest Supervisor, Chelan. (6)
Washington (W.)—G. B. COLEMAN, Acting Forest Supervisor, Sumas; B. P. KIRKLAND, Forest Assistant. (6)
Washington (Wenatchee Div.)—D. B. SHELTER, Forest Supervisor, Wenatchee. (6)
Wenaha—J. M. SCHMITZ, Forest Supervisor, Walla Walla. (6)

WYOMING.

- Bear Lodge**—E. M. HAMILTON, Acting Forest Supervisor, Deadwood, S. Dak.; H. C. NEEL and JOHN MURDOCH, JR., Forest Assistants. (2)
- Big Horn**—W. E. JACKSON, Forest Supervisor, Big Horn. (1)
- Black Hills**—E. M. HAMILTON, Acting Forest Supervisor, Deadwood, S. Dak.; H. C. NEEL and JOHN MURDOCH, JR., Forest Assistants. (2)
- Caribou**—J. T. WEDEMEYER, Forest Supervisor, Idaho Falls, Idaho. (4)
- Crow Creek**—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
- Medicine Bow (Wyo. Div.)**—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
- Sierra Madre**—J. W. NELSON, Forest Supervisor, Saratoga; J. E. KEACH, R. A. STRETCH, and JOHN H. BRIDGES, Forest Assistants. (2)
- Uinta**—WILLARD I. PACK, Forest Supervisor, Provo, Utah; D. S. MARSHALL, WM. M. ANDERSON, Deputy Forest Supervisors. (4)
- Yellowstone (Shoshone Div.)**—H. W. THURSTON, Forest Supervisor, Cody; C. N. WHITNEY, Forest Assistant. (1)
- Yellowstone (Teton Div.)**—ROBT. E. MILLER, Forest Supervisor, Jackson. (4)
- Yellowstone (Wind River Div.)**—HENRY C. HALL, Acting Forest Supervisor, Pinedale. (4)

SERVICE CHANGES IN NOVEMBER.**APPOINTED.****Forester—**

LAW: E. A. LANE, Expert.

Products—

WOOD UTILIZATION: R. H. GREEN, Laboratory Aid and Engineer. C. E. MYERS, Laboratory Assistant in Timber Tests. HARRY WEYLS, Laboratory Assistant in Timber Tests. W. C. GEER, Collaborator.

Operation—

LANDS: H. NORTON JOHNSON, Expert Miner.
ENGINEERING: F. E. JOY, Expert.

PROMOTED.**Products—**

PUBLICATION: ENOS A. MILLS, Forest Agent.

LEAVE WITHOUT PAY.**Products—**

WOOD UTILIZATION: ALBERT H. PIERSON, Forest Assistant.

Silviculture—

MANAGEMENT: F. X. SALZMAN, Lumberman.

SEPARATED.**Products—**

WOOD UTILIZATION: C. J. RAFF, Laboratory Aid and Engineer.

Silviculture—

MANAGEMENT: GEO. H. MYERS, Expert.

SILVICS: ROBT. WEITKNECHT, Assistant Forest Expert.

With deep regret announcement is made of the death, on November 15, of Mr. John D. Leland, Chief of the Section of Adjustment in the Branch of Grazing.

SERVICE NOTES FOR DECEMBER.

These notes contain instructions and necessary information for Forest officers, and will therefore be carefully read and kept on file for reference.

LAW.

On October 31 in the United States court for the district of Alaska, judgment was rendered ejecting Lyman A. Plumley from premises in the Alexander Archipelago National Forest occupied by him for saloon purposes. Costs were awarded in favor of the Government. The trespasser was occupying a mill-site location which was canceled by the Secretary of the Interior May 12, 1903 (32 L. D., 128), and resisted all efforts of the Forest officers to prevent the sale of liquor upon Government property. The same judgment was rendered against Orenshaw and Moffat, who occupied another site under like circumstances. Suit was begun in these cases October 5, 1906. These judgments will have a salutary effect upon the pending cases involving saloon trespasses throughout the United States.

Charge for Hydro-electric Power Plants—

The legality of the proposed charge for hydro-electric power plants on the National Forests is sustained by the following opinion of the Attorney-General (26 Op., 421) :

DEPARTMENT OF JUSTICE,
Washington, October 5, 1907.

The Honorable, The SECRETARY OF AGRICULTURE.

SIR:—I have the honor to acknowledge the receipt of your letter of August 13 last past, requesting an opinion from me in regard to your authority to make a "conservation charge" as a condition for permits to use lands or resources within the limits of the National Forest reserves. The specific questions propounded by you are whether you have authority, in making such charges, to include a reasonable compensation—

1. For the use of the ground occupied by any reservoirs, diverting dams, or power stations, according to their area, without regard to its special value for the particular purpose contemplated by the permit.
2. For the right of way of any canal, flume, pipe, or pole line, according to its length, without regard to its special value for the particular purpose contemplated by the permit.
3. For "conservation," by which is meant all other advantages, opportunities, resources, or services, furnished by the Government to the permittees, or damage suffered by it through the enjoyment of the permit; or, in other words, the special value of the land occupied by the permittee for the particular purpose contemplated by the permit in excess of its value for general purposes.

These permits are authorized by the act of February 15, 1901 (31 Stats., 790), of which the material portion is as follows :

*The Secretary of the Interior * * * is authorized and empowered, under general regulations to be filed by him to permit the use of rights of way through the public lands, forests, and other reservations of the United States, and the Yosemite, Sequoia, and General Grant National parks, California, for electrical plants, poles, and lines for the generation and distribu-*

tion of electrical power, and for telephone and telegraph purposes, and for canals, ditches, pipes and pipe lines, flumes, tunnels, or other water conduits, and for water plants, dams, and reservoirs used to promote irrigation or mining or quarrying, or the manufacturing or cutting of timber and lumber, or the supplying of water for domestic, public, or any other beneficial uses to the extent of the ground occupied by such canals, ditches, flumes, tunnels, reservoirs, or other water conduits or water plants, or electrical or other works permitted hereunder, and not to exceed fifty feet on each side of the marginal limits thereof, or not to exceed fifty feet on each side of the center line of such pipes and pipe lines, electrical, telegraph, and telephone lines and poles, by any citizen, association, or corporation of the United States, where it is intended by such to exercise the use permitted hereunder of any one or more of the purposes herein named: *Provided*, That such permits shall be allowed within or through any of said parks or any forest, military, Indian, or other reservation only upon the approval of the chief officer of the Department under whose supervision such park or reservation falls and upon a finding by him that the same is not incompatible with the public interest: *Provided further*, That all permits given hereunder for telegraph and telephone purposes shall be subject to the provisions of title sixty-five of the Revised Statutes of the United States, and amendments thereto, regulating rights of way for telegraph companies over the public domain: *And provided further*, That any permission given by the Secretary of the Interior under the provisions of this act may be revoked by him or his successor in his discretion, and shall not be held to confer any right, or easement, or interest in, to, or over any public land, reservation, or park.

By section 1 of the act approved February 1, 1905 (33 Stats., 628), it is provided that—

The Secretary of the Department of Agriculture shall, from and after the passage of this act, execute or cause to be executed all laws affecting public lands heretofore or hereafter reserved under the provisions of section twenty-four of the act entitled "An act to repeal the timber-culture laws, and for other purposes, approved March third, eighteen hundred and ninety-one, and acts supplemental to and amendatory thereof, after such lands have been so reserved, excepting such laws as affect the surveying, prospecting, locating, appropriating, entering, relinquishing, reconveying, certifying, or patenting of any of such lands."

Section 5 of the same act is as follows:

That all money received from the sale of any products *or the use of any land or resources* of said forest reserves shall be covered into the Treasury of the United States, and for a period of five years from the passage of this act shall constitute a special fund, available until expended as the Secretary of Agriculture may direct for the protection, administration, improvement, and extension of Federal forest reserves.

It appears to me that in so far as the questions relevant to your inquiry are questions of law they have been determined by the opinion of my predecessor, furnished to you on May 31, 1905. (25 Op., 470.) In that opinion Attorney-General Moody says:

Under the act of 1897 you are simply directed to so regulate the occupancy and use of these reservations as to insure the objects thereof and preserve the forests thereon from destruction. The act contains nothing inconsistent with the making of a reasonable charge on account of the use of the reserves under the permit granted by you. By the act of 1905 you are to cover into the Treasury money received from the "use of any land or resources" of the reservations, which "shall constitute a special fund * * * for the protection, administration, improvement, and extension of the Federal forest reserves." Any sums of money realized in this connection would thus tend to preserve the forests and insure the objects of reservations, and it might therefore be contended that Congress in authorizing you to regulate their use and occupation considered the incidental question of charging for their use a proper subject to be left to your judgment and discretion. That such was the Congressional intent finds support in the fact that services somewhat analogous to compensation have been required for several years without any indication of a disapproval thereof on the part of Congress.

Furthermore, your power to prohibit absolutely the use or occupation of any forest reserve, when such action is deemed by you essential to insure its objects and preserve the forests from destruction, would probably be unquestionable, and that the authority to prohibit carries with it the right to attach conditions to a permission is well established. (22 Opin., 13, 27.)

In answer to your third question, therefore, I have to advise you that, in my opinion, you are authorized to make a reasonable charge in connection with the use and occupation of these forest reserves whenever, in your judgment, such a course seems consistent with insuring the objects of the reservation and the protection of the forests thereon from destruction.

The question under consideration in that case was whether you had authority to make a reasonable charge as a condition of a permit under the act approved June 4, 1897 (30 Stats., 35), which authorized the Secretary of the Interior to—

Make such rules and regulations and establish such service as will insure the objects of such reservations, namely, *to regulate their occupancy and use* and to prevent the forests thereon from destruction.

It will be observed that neither of these acts conferred upon the Secretary of the Interior expressly any authority to make a charge of any kind as a condition of granting the permits which they respectively authorized. It was held, however, by Attorney-General Moody that such authority was implied in the power conferred upon the Secretary by the act of 1897 to grant or refuse the permits, in his discretion, and the act of 1905 was referred to as substantially a legislative recognition of this authority on his part. If, however, the act of 1897 conferred upon the Secretary of the Interior—and, therefore, afterwards, upon the Secretary of Agriculture—the authority, in his discretion, to require payment of a reasonable charge as a condition of issuing any such permits as are authorized by the said act, it seems to me quite clear that the act of 1901, above quoted, conveys the like authority. The language of the later act appears to me more explicit than that of the former, and the intention of the Congress to leave the privileges granted under that act revocable in the discretion of the Secretary, as is expressly stated in the last proviso, above quoted, of the act of 1901, seems to be more nearly consonant with a purpose to intrust to his discretion all matters connected with the granting of such permits than is any relevant provision to be found in the act of 1897. I conclude, therefore, that you are authorized by the act of 1901 to make the granting of permits for the purposes contemplated by that act dependent upon the payment, by the persons receiving such permits, of such charges as you may deem reasonable for the purposes contemplated by the law.

Whether charges based upon the three grounds specifically enumerated in your letter requesting an opinion would or would not be reasonable is not, under the circumstances of this case, a question proper to be determined by this Department, but a matter left by the law entirely to your discretion. In *Riverside Oil Company v. Hitchcock* (190 U. S., 325), referred to in the opinion of Attorney-General Moody, above quoted, the court says: "The responsibility, as well as the power, rests with the Secretary, uncontrolled by the courts." This would seem to be no less true as to the question presented in the present case.

It may be well for me to say, however, that I do not think it clear, as seems to be assumed in some of the papers forwarded with your letter, that no charge can be made for water used by persons to whom permits may be granted under the act approved February 15, 1901. Such persons, independently of their permits, would have no right or authority to appropriate the waters within the forest reserves; at all events, for such a purpose as the production of electric power. It is true that the Congress and the courts have recognized a right to appropriate water on the public lands under State laws or local customs, but lands within the forest reserves are not covered by general statutes referring to the public lands; and the right to use water on such reserves can be secured, it would seem, only under the provisions of the act approved June 4, 1897, and of other legislation specifically referring to the reserves, unless, perhaps, such rights existed before the particular reserve in question was created. I do not, however, consider it necessary to express a positive opinion on this subject, since I understand from your letter that you do not intend to consider the value of the mere use of the water itself in fixing the compensation to be paid as a condition of permits for its use.

I advise you, therefore, in conclusion, that, in my opinion, you have the right to make what you believe to be a reasonable charge, as a condition of issuing

permits under the act of February 15, 1901, and that your determination is decisive as to what charge is, or is not, reasonable for such purpose.

I remain, sir, yours, very respectfully,

CHARLES J. BONAPARTE,
Attorney-General.

BRANCH OF SILVICULTURE.

OFFICE OF MANAGEMENT.

Extension of Time in Timber Sales—

In Class A and unadvertised Class B sales extensions of time should be granted only in writing and a copy of the letter should in each case be forwarded to the Forester for information.

Whenever an extension of time is desired in an advertised sale, an application should be made in accordance with the form given below. If necessary, in the judgment of the supervisor, it may also be required in sales of less than \$100. This form may be approved by supervisors in A and B sales, but a copy in each case should be forwarded to the Forester. In Class C sales two copies of the application should be submitted to the Forester for approval. In all sales in which bonds have been given the supervisor should write to the Forester for proper forms.

APPLICATION FOR AN EXTENSION OF TIME.

John Jones. Timber sale.
July 2, 1906. Shawnee.

I, John Jones, of Shawnee, Kansas, purchaser of the timber in the above-designated case, by a contract signed in duplicate by me on ———, 190—, and approved by the ———, ———, 190—, under the terms of which I was allowed
(Title of approving officer.)

——— year — from ———, 190—, for the cutting and removal of said timber, respectfully request an extension of time to ———, 190—, within which to complete the cutting and removal of said timber.

If this application is approved I do hereby, in consideration of said extension of time, promise and agree to cut and remove said timber in strict accordance with all and singular, the rules and regulations of the aforesaid contract, and, further, to pay for all timber not removed from the National Forest during the time specified in said contract at the rate of \$——— per ———, in advance
(M ft., B. M., etc.)

payments, as set forth in said contract.

Signed in duplicate this —— day of ———, 190—.

Witnesses:

_____, _____, _____, _____, 190—.
(City.) (State.) (Month.) (Day.)

Approved and extension granted under the above conditions:

(Signature of Approving Officer.)

(Title.)

If an increase in price is not considered necessary, the clause “and further to pay for all timber * * * contract” should be omitted and the word “provisions” should be inserted after the word “rules,” so that the form will read “the rules, provisions, and regulations of the aforesaid contract.”

Advertised Class B Sales—

The attention of the supervisors who have been authorized to advertise Class B sales is called to the fact that the amount of timber which can be advertised under the authorization is limited to the amount named in the letter of authority, whether the timber is advertised under a general notice or in response to an application. Furthermore, the authority is given to the person named in the letter and does not go with the office, so that a Forest officer who is in charge of the office during the supervisor's absence is not authorized to advertise under the supervisor's letter of authority.

In making advertised Class B sales in which the board foot is not the unit of scale, supervisors should be sure that the amount included in the sale is not in excess of the amount they have been authorized to sell. For instance, when it becomes necessary to convert board measure into cord measure or vice versa, a cord should be considered equivalent to 500 feet, B. M.

Form of Timber Sale Applications—

All applications for timber should be prepared, as nearly as possible, in the form which will be followed in the final contract, since this gives to purchasers, from the beginning of the transaction, an idea of just what will be required of them. The contracts sent out in Class C sales should be used as models, so far as applicable.

Entries in Scale Books—

Forest officers in charge of timber sales should make all entries directly in the scale books and not transfer them from notebooks or from cards. This practice has arisen from a desire to keep the books clean, but is not advisable, owing to the chance of error in making such transfers. It is better to have the original record in the scale book, even at the sacrifice of neatness.

Sawmills—

Clause C, under Regulation 10, page 44, of the Use Book, is amended by striking out the second line. This correction will appear in the next reprint of the Use Book. It is intended that supervisors may not issue permits for sawmills of the capacity of more than 20,000 feet B. M. per day, regardless of whether or not such mills are being operated in connection with a sale of National Forest timber.

Publication of Advertisement—

The number of publications of a notice of sale, under the Secretary's letter of authority, must not exceed five, the number named in the letter of authority, since the publishers' account can not be allowed for more than that number. When it is necessary to correct serious errors in a notice, the last day for receiving bids should be made thirty days from the date of the first appearance of the corrected notice, so that a full period of thirty days will be allowed for submitting bids. The number of publications should not, however, be increased. In Class B sales, also, the number of publications should not exceed five.

OFFICE OF EXTENSION.

Ranger Nursery Reports—

In many of the ranger nursery reports submitted by supervisors the number of seedlings has been omitted. Under "Plant Material," on Form 991, there is a heading "Seedlings," and under this should be given the number of seedlings grown from seed sown in the spring of 1907. Supervisors who have omitted this item in submitting their report should at once send in another form including it.

OFFICE OF SILVICS.

New Forest Literature—

The publication of lists of new forest literature in the Field Program will be discontinued for the present. Mimeographed lists will be prepared each month, however, to be distributed throughout the various offices of the Service.

Books for the Use of Rangers—

The attention of rangers is called to the branch libraries for the use of field men in the offices of supervisors. Now that the winter season is coming on, when there will be less out-door work on the Forests, it is hoped that all rangers will avail themselves of the opportunity for reading and study offered by these libraries.

Public Land Laws and Regulations—

Any supervisor who desires to place a bound volume of public laws and regulations in the hands of each ranger under his direction will be provided with enough copies for this purpose by applying to the Forester.

BRANCH OF GRAZING.

Crossing Permits—

Recent inspections of various Forests have developed the fact that persons wishing to drive stock across a Forest are greatly handicapped, and sometimes seriously delayed, by reason of the failure of the supervisor to authorize rangers to issue crossing permits over properly approved and recognized routes of travel, according to the provisions of Regulation 59.

It is desirable to simplify and facilitate the crossing business as much as possible, and to attain this end supervisors are requested to delegate to all properly qualified rangers the authority to issue crossing permits allowing stock to be driven over all regular driveways and commonly recognized routes. Rangers issuing crossing permits should furnish the supervisor with two copies—one for the files of his office and the other for transmission to the Forester. It is expected that supervisors will take the fullest advantage of the authority granted by Regulation 59, and thus reduce to the minimum the delay incidental to crossing a Forest.

New Herder's Identification Card—

A new Herder's Identification Form 976 has been received from the printer and a limited supply sent to supervisors. Additional supplies will be furnished

upon requisition, and supervisors are requested to promptly order what they will need, so that they may be supplied before the opening of the next grazing season.

Payment of Grazing Fees—

The attention of Forest officers is called to the change which was made on July 1 under Regulation 49 in reference to the time when payment of grazing fees is required. Under the old regulation the payment was due "thirty days after the receipt of the notice," whereas under the new regulation it need not be made until "thirty days before the beginning of the grazing period."

The reason for this change is to provide that action may be taken upon grazing applications as far in advance of the date for the beginning of the grazing period as possible, so that the stockmen may be informed in regard to how much of their stock will be allowed to graze upon the National Forest ranges. Only the new Form 762, which contains the above provision, should be used in sending out notice to grazing applicants for the season of 1908.

BRANCH OF OPERATION.

OFFICE OF MAINTENANCE.

Registration of Official Mail—

Under a decision of the Attorney-General of the United States, the official mail of agents of the Executive Departments, except officials temporarily absent from Washington, is not entitled to free registration. Members of the Forest Service assigned to work outside of Washington will pay the regular fee when registration of mail is necessary, and submit the post-office receipts with accounts for reimbursement.

Returning Supplies to the Property Clerk—

Many packages have been received by the property clerk from members of the Service in the field without any mark of identification either on or within the package. It is absolutely essential that a memorandum should be inclosed with the shipment, so that a proper record may be kept.

Rangers' Tables—

The specifications for rangers' tables have been modified with regard to the class of material and construction. The table may be constructed of selected lumber of any suitable kind, rather than of selected white and yellow pine. Ordinary screws may be used, and the corners of the drawer may be nailed or glued instead of dovetailed. It is considered that tables of such material and construction will answer every purpose fully, and should be secured at a much more reasonable price than the tables called for by the original specifications.

OFFICE OF LANDS.

Special Uses—

The following circular letter regarding applications for special uses has been sent to supervisors:

NOVEMBER 15, 1907.

To Forest Supervisors:

Since the transfer of pasture, drift-fence, and hay-sale cases from the Branch of Operation to the Branch of Grazing, as announced in the September Field Program, it has become necessary to insist upon a strict observance of the rule that "each application should cover *one use only*."

The following kinds of special-use cases will be handled by the Branch of Grazing:

Corrals, dipping vats.

Pastures, drift fences.

Windmills, watering troughs.

Cabins, free of charge for persons engaged in handling stock grazed under permit.

Stock shelters, free of charge in connection with pastures.

Hay sales.

All other kinds of special-use cases except sawmills, which are handled by the Branch of Silviculture, will be handled by the Branch of Operation.

Supervisors will also note that specific authority granted in exceptional cases not covered by the general regulations is limited to such cases only and must not be applied to others, and therefore special authority must first be obtained from the Forester before specific exceptions are made by the supervisor.

C. S. CHAPMAN,
Acting Assistant Forester.

The Forest Service is informed that, owing to lack of funds to pay the cost of advertising, the Secretary of the Interior is unable to open to settlement and entry any more of the lands listed under the act of June 11, 1906, until Congress has made an appropriation for that purpose. It becomes of the utmost importance, therefore, that the supervisors inform persons entitled to free permits under the instructions of the Use Book (pp. 42-43) of the manner in which such permits may be obtained, and give permittees advice and assistance necessary to the use and enjoyment of their permits until the lands may be opened to settlement and entry.

Forest officers should remember that certain special-use cases may be closed by them without authority from the Forester. See the Use Book, page 49.

A form of agreement is being prepared and will be sent to supervisors for use in issuing special-use permits authorizing the connection of private telephones with lines maintained by the Forest Service.

In several of the National Forests springs are found which are of great value for summer-resort and sanatorium uses. Supervisors should be particularly careful before issuing any permits which would affect the use of such springs to bring the matter to the attention of the Forester.

Claims—

It is extremely important that Service Order 5 be more faithfully observed, especially in securing proof where the recommendation is unfavorable to the claim. In such cases the Forest officer should make a full and complete statement. Every question should be fully answered if possible. If it can not be answered, the fact should be stated. Every detail should be given in full and

with definiteness. Such statements as "absent part of the time," or "occasional absence," are of no value whatever as a basis for the Forester's recommendation.

The General Land Office insists that a report must be accompanied by the names and post-office addresses of witnesses and the substance of the matters to which they would testify if called upon at a hearing. The showing must be sufficient, if established to be true at a hearing, or other proceedings had, to warrant the cancellation of the entry or the rejection of the claim. If witnesses are not available, the fact should be stated. The ranger or guard, and the supervisor, should embody in the report a statement of the facts and conditions showing noncompliance with the law to which they are competent to testify at a hearing, should one be had.

Forest officers, in reporting on claims under the timber and stone act of 1878, should remember that the essential facts to be made clear are (1) whether the application, or sworn statement, was filed prior to the date of the withdrawal of the land for National Forest purposes; (2) whether the final proof and cash payment were made within the time required by law, and (3) whether the claim, or entry, was made for the exclusive benefit of the claimant, or, if they believe the claim or entry to have been made at the instance or in the interests of another, or a company, to state their own knowledge of the facts, or any information which justifies their belief, and the names and post-office addresses of reliable witnesses and brief abstracts of their testimony.

If the Forest officer has complete cover data available, an examination of the land need not be made, except where it is believed that title to the land is being sought for another purpose.

In many cases no response has been received from calls made for several months past for reports on claims. If Forest officers can not make prompt report, they should inform the Forester and give reasons for delay.

The name of the land district should invariably be given in reports on claims.

Supervisors should keep themselves supplied with the latest editions of forms 654 and 655, and form 175 for reporting on mill-site claims.

Many reports on claims, on form 655, have been received from the supervisors, in which under paragraph 16, after recommending cancellation of the entry or adverse action, the statement is made that the tract is desirable for a ranger station or administrative site, or that in the event of the cancellation or setting aside of the claim the land should be withdrawn for such purposes.

The fact that land covered by an entry or claim might be useful for a ranger station or administrative site can have no influence on the recommendation of the Forester or the action of the General Land Office. Where any such tract is desired for an administrative site, the recommendation should not be made in the report on the claim, but a separate report, in proper form, should be submitted.

Boundaries—

Since many requests for administrative sites which were returned for correction have not been sent to the Forest Service, supervisors are reminded and they are requested to correct the reports and forward them with as little delay as possible.

A printed form for reports upon proposed administrative sites will be furnished the supervisors on the 1st of December. It is requested that the utmost care be exercised, in preparing requests for withdrawal of tracts, to furnish all the information called for by the form, and that, as therein directed, all necessary supplemental reports be attached thereto.

OFFICE OF ENGINEERING.

The attention of supervisors is called to the fact that when purchasing telephone instruments it is necessary to specify not only the make of the instrument, but whether a 1,000, 1,600, or 2,500 ohm ringer is desired. This information can best be secured from the telephone company with which connection is made.

OFFICE OF ORGANIZATION.
New Form of Boundary Notice—

A new form of boundary notice (No. 270) is now available upon requisition. This form is supplied with a blank diagram of four townships on the scale of one-third of an inch to the mile. It is intended that the exact location of each notice posted shall be designated by placing a star upon this diagram.

Designation of Forest Divisions—

Hereafter administrative divisions of the National Forests will be designated by placing the name of the division after the words "National Forest," thus:

The Big Hole (S) National Forest.

The Washington (Wenatchee Div.) National Forest.

The above form of designation will be used in all correspondence and forms of the Forest Service.

NOVEMBER 18, 1907.

To Forest Supervisors:

The Commissioner of the General Land Office has informed the Forester that reports of Forest officers unfavorable to the validity of claims in the National Forests should be regarded as confidential. Jurisdiction in determining the validity of unperfected claims in National Forests rests in the General Land Office, and the Forest Service will cooperate to further this work.

Therefore please do not hereafter permit inspection of unfavorable reports on such claims. There would be no impropriety in your informing claimants, upon their request, if you wish to do so, that your report is unfavorable, but in no case should you inform them of the character of the evidence on which your reports are based or of the names of the witnesses by whose testimony they are to be substantiated. Claimants or their attorneys applying for this information should be informed that it can be obtained only from the Commissioner of the General Land Office.

C. S. CHAPMAN,
Acting Assistant Forester.

SERVICE ORDER.

SERVICE ORDER 9.

NOVEMBER 5, 1907.

Additional Regulations Relating to Special-use Applications—

To the Forest Supervisors:

The following additional regulations relating to applications for special-use permits for commercial power plants were approved by the Secretary of Agriculture on October 25:

Regulation 10a.—Applications for special-use permits for commercial power plants must be accompanied by certified evidence of water right or appropriation under the local laws if the use of water is involved, maps in duplicate on tracing linen showing the project as surveyed and field notes in duplicate. Both maps and field notes must be verified by the surveyor's certificate under oath.

Regulation 10b.—If any person shall make, sign, or swear to a false surveyor's certificate under regulation 10a, the Forester, after notice and hearing, may make an order that no map or field notes made by or bearing or purporting to bear the certificate of the person so making, signing, or swearing to such false certificate shall be received or filed until such time as the Forester may revoke such order.

Regulation 10c.—If any individual applicant personally or if any corporation applicant by its officers or agents shall offer or file any map or field notes bearing a false surveyor's certificate or oath, knowing the same to be false, the Forester, after notice and hearing, may make an order that no application from such applicant shall be received or filed, and no sale, permit, or use shall be made, issued, or granted to him until such time as the Forester may revoke such order.

Forest supervisors will please apply these regulations to all applications for special-use permits for commercial power plants hereafter filed with them.

OVERTON W. PRICE,

Associate Forester.

